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OUTLOOK

M A G A Z I N E



**Medicine And
The New Time:
Images of Man**

DEC 22 '83

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ARCHIVES

Mallinckrodt Institute Begins NMR Research

A doughnut-shaped, five-kilogauss magnet — heart of the Mallinckrodt Institute's nuclear magnetic resonance program — was recently installed in a 5,000-square-foot addition between Barnes and Barnard hospitals. This acquisition places the Mallinckrodt Institute among the few American institutions assessing the value of NMR as an addition to computed tomography (CT) and positron emission tomography (PET). NMR provides detailed images of tissue without employing

invasive techniques or ionizing radiation.

NMR imaging also reflects the biochemical status of tissue by approximating the concentration of biologically important chemicals. This five-kilogauss system will soon be supplemented by a 15-kilogauss NMR device. The larger magnet will enable researchers to monitor fluctuations in the concentrations of a greater variety of ions including phosphorus, nitrogen, fluorine and oxygen.



OUTLOOK

M A G A Z I N E

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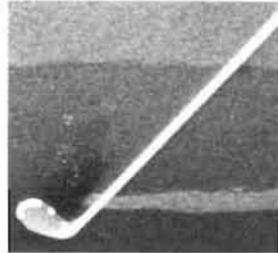
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On The Cover:

This self-portrait by Albrecht Durer was one of many art works used by Professor Norris K. Smith in the opening lecture of last year's "Medicine in Modern Society" course. An article written by Professor Smith and based on his presentation to the medical students begins on page 14.

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SPORTS INJURIES

The Pro/Am Journey of Medicine



by Suzanne Hagan

Interest in fitness has exploded during the past two decades, and Americans of all shapes, sizes, ages and abilities have plunged in. Their pains, strains and sprains have given birth to spin-off specialties such as athletic training and sports medicine.

Robert A. Shively, M.D., assistant professor of orthopedic surgery at Washington University School of Medicine, and sports medicine specialist, treats high-school and college-age youths, plus adults ranging from the born-again runner to the weekend athlete. "In routine office practice, I see mostly overuse syndromes," he says. "In other words, someone begins doing more of what he was already doing, or begins to do it harder. A typical example would be the 12-mile-per-week runner who decides to run in the marathon, so he decides to run 50 miles a week. Or the guy who hasn't picked up a ball all winter, goes out in the spring and starts throwing long and hard until his shoulder hurts." Shively is on the staffs of Barnes and St. Louis Children's hospitals at the Washington University Medical Center.

Overuse also plagues professional athletes when they begin training, and it does not necessarily correlate with the extent of conditioning, says Jordan H. Ginsburg, M.D., assistant clinical professor of orthopedic surgery, and team doctor for the St. Louis Football Cardinals. Ginsburg is on the staffs of Barnes, Jewish and Children's hospitals at Washington University Medical Center.

"During early training camp," Ginsburg said, "the Football Cardinals have two practices a day. On that schedule, sometimes the body doesn't have a chance to rebound from minor injuries. Also, a lot of muscle use is activity specific. You can do all the running in the world on your own, but that is not the same as lining up for those short bursts when the whistle blows."

Both Ginsburg and Shively agree that many sports tend to produce sports-specific injuries to some extent — knee injuries in skiers and football players,

elbow injuries in basketball and tennis players. And Ginsburg treats many Astroturf-induced toe sprains and other foot injuries because Astroturf's traction is better than that of grass. Many football injuries tend to be position specific, according to Ginsburg. "Many shoulder separations in a wide receiver or defensive back are usually made diving for a catch. Most of the knee injuries in linemen are from collisions and subsequent high hits that stretch an already injured ligament."

Many principles of good conditioning and training have been in place for the Football Cardinals for a number of years. The team has had a flexibility coach for the past several years, and before workouts there is always a warm-up and stretching session. Afterwards, there is a

"In routine office practice, I see mostly over-use syndromes," he says. "In other words, someone begins doing more of what he was already doing, or begins to do it harder."

cool-down stretch. Training also includes a good mix of strength, endurance and stretching activities, plus attention to fluid replacement. And, in general, professional players arrive at training camp in fairly good condition.

However, player enlightenment and coaching expertise have not uniformly filtered down to the high-school level, according to Shively. "There are still some coaches who won't let the kids get a drink when they're thirsty. And their response to fatigue often is: 'Go run three laps.'"

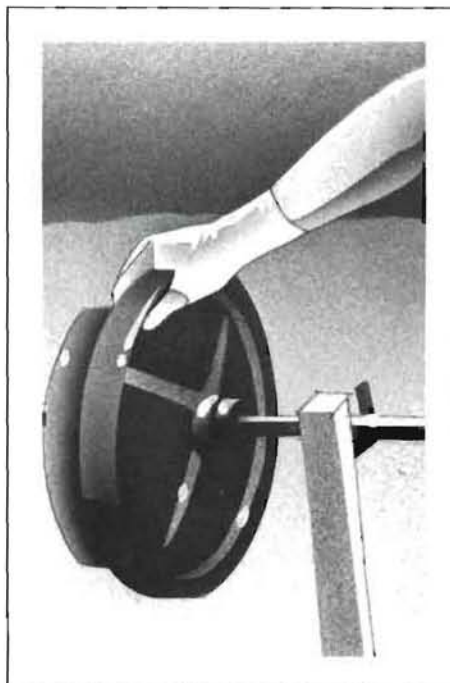


Shively says that his own experience with high school coaches and teams has been very good, and he empathizes with coaches. "They usually have families to support, and their careers and jobs depend on whether a bunch of 16- or 17-year-old kids performs well — wins. Most of them are really concerned about the kids, but the potential exists for trouble. These coaches have to act as trainers and conditioners, too."

Shively is also concerned about what one writer has called "the Nadia Comaneci syndrome," the growing tendency for younger children to participate in strenuous activities that can cause microtrauma, with the potential for long-term harm. "Microtrauma probably is on the upswing," he says, "for two very good reasons. More and more growing youngsters are involved in tumbling, gymnastics and ballet — very demanding activities which force them to extend the limits of joints and supporting structures beyond the normal range of movement. That is why they need tremendously long warm-up periods. And they practice every day, with no layoffs."

Shively continued, "We're a very competitive society. There are junior league activities for football, basketball, baseball, wrestling, soccer, swimming, gymnastics — you name it. The kids may just want to play, but most of their coaches want to win. There is a lot of competitiveness, pushing to do better, throw faster, jump higher. A strong focus on winning applies a lot of strain to young bodies that is potentially detrimental."

Shively, a former linebacker in high school and college, takes a dim view of "playing hurt," at least when it comes to children. "Very few kids are going to make their living in sports. Most have to think about growing up to be self-supporting citizens. So, if they get injured, I treat them very conservatively. I would never stand for anesthetizing a kid's injury and sending him back into the game."



"No one has been able to show that before the age of 14 weight training really does any prolonged good. However, even before puberty a reasonable weight training program won't harm a child," says Shively.

Ginsburg treats the Cardinals in much the same way. "I don't treat their sprains and strains much differently than I treat injured patients in my practice. Obviously, a severe sprain that is grossly swollen and tender should be immobilized temporarily. But with crutches and a small compression dressing, plus lots of icing down in the first 24 to 48 hours, we can decrease recovery time. We start patients right away through the painless range of movements. In general, we try to mobilize joints as much as possible."

Shively agrees that applying the right principles can speed the return to activity, but it can be chancy. "A second-degree sprain or strain is, by definition, a partial tear. The tear might be five percent or 95 percent. A five-percent tear will respond well to cooling and motion. But a 95-percent tear could be aggravated by cooling and motion. As a general rule, I don't use

movement and anesthesia as a rehabilitative measure because recreational athletes do not have access to this kind of structural rehabilitation. There would be less risk for the highly trained, professional athlete with access to a training room."

The main difference between treating the professional athlete and the ordinary patient," Ginsburg says, "is the resources available." The Football Cardinals have a full-time training staff who can treat the players with compression machines, taping, whirlpools, and so on. In training camp, there are three treatment times a day. In most cases, the expense of such frequent treatment would be unrealistic for injured amateur athletes. "Also," Ginsburg emphasizes, "we have almost complete control over the athlete. I can lay down strict limitations over how much I want them to run, or how much weight work I want them to do. I've got supervision, plus unlimited access to rehabilitation equipment." There is no difference in philosophy. "We can be more aggressive with the professional athlete than with the office workers and weekend players, simply because it is easier. In any case, there is no way you can treat a severely sprained ankle that is swollen up like a balloon so that the person can play next week — whether the patient is a professional athlete or a munny leaguer."

Conditioning and rehabilitation frequently involve the use of weight training equipment. On television, pro athletes are seen taking a break from a workout to tout some product or another — sometimes the equipment itself. Pre-season sports newscasts show the hometown heroes sweating away at the machines as prelude to championship. Should children use weights in their training?

"No one has been able to show that before the age of 14 weight training really does any prolonged good. However, even before puberty a reasonable weight training program won't harm a child," says Shively.

Weight-lifting equipment has some definite rehabilitative value for adults

who are injured, but weight training in general draws a negative reaction from Shirley A. Sahrman, Ph.D., a licensed physical therapist and neurophysiologist in the Department of Neurology and the program in Physical Therapy. She is also on staff at the Irene Walter Johnson Institute of Rehabilitation, part of the Department of Preventive Medicine and Public Health at Washington University School of Medicine. Sahrman thinks weight training is often a bad idea for both men and women because it can aggravate existing muscle imbalances. "Women can hurt themselves because they don't have the upper body strength that men do. And men can have problems when they go to excess," Sahrman says. "I've seen men after weight training who could not raise their arms through the full overhead range because they altered the balance of muscle function by strengthening one component of the musculature more than the other components. The mechanical balance of forces developed by muscle is particularly important to the range and quality of movement of a joint. This type of imbalance can lead to shoulder pain because the upper arm bone moves excessively upward in the shoulder joint during movement, and pinches soft tissue. The change in muscle balance also alters the ratio of movement between the shoulder blade and the upper arm bone. The result is that as the arm is lowered, the scapula moves with it to a greater degree than is normal."

Sahrman can assess nagging knee pain or ankle pain brought on by inappropriately performed exercise and the resulting mal-alignment at the joint. If a muscle imbalance is at the root, she instructs the athlete in corrective exercises to strengthen muscles whose weakness places an inordinate strain on other muscles, and to stretch muscles that are too tight. She points out that the Cybex machine, which electronically measures the strength of muscle contractions, really doesn't provide specific information about the quality of motion of a joint and the relative balance of muscle in contribu-



The historical lack of emphasis on the participation of girls in sports may be changing, but Sahrman points out that there is a price to be paid for short-changing girls in the past.

tion. The Cybex merely measures gross strength. Furthermore, the Cybex cannot evaluate the form of a movement — how it is completed. "With the knee, that's not a big problem," Sahrman says. "But in the hip or shoulder, there are many improper ways to achieve movement. Athletes and others can have more than average strength in their musculature and still not walk correctly."

The historical lack of emphasis on the participation of girls in sports may be changing, but Sahrman points out that there is a price to be paid for shortchanging girls in the past. "Women in their 40s and 50s are now becoming interested in fitness activities and exercise classes. But, because of weakened trunk muscles usually exaggerated by having borne children, they often develop pain when they begin exercising. Instead of seeking advice about their specific needs and appropriate exercise,

they usually just simply stop whatever exercising they were doing. I really hate to see that."

Some of these women seek advice from Sahrman, as do younger ones who've taken up running as a sport after having other athletic pursuits in college. She also treats many dance majors who have developed knee, back, or foot problems because of muscle imbalances that have become greatly exaggerated. In these cases, corrective exercises have helped. "But they must be done correctly," she emphasizes, "and they must be designed for the specific imbalances of each individual. They should not impose greater force demands on trunk and girdle muscles than they can tolerate and still maintain ideal alignment."

One of the major differences among all levels of sports is the nature of the pre-sports physical examination. For under-60 healthy adults embarking on a "gradual, sensible exercise program," the traditional physical exam has been discounted by the American Medical Association, and other groups. For high school and college players, physicals tend to be assembly-line style and cursory, particularly for boys. Shively has conducted some of these "GI-style" exams, and says that they are done simply to meet the requirement that secondary school athletes be examined. "They're probably almost worthless," he concedes. "Furthermore, the literature has shown them to be of little benefit in detecting potentially dangerous conditions."

In an "assembly-line style" physical exam, physicians must contend with lack of time and lack of individual medical histories, the varying levels of expertise from assistants, and the general commotion of a bunch of boys milling around in the school's "examining room." Shively encourages high school athletes to have an examination by their regular physician, who is familiar with their history and can give them individual attention in the professional office. "There is no way that those rare, occult conditions can be

BASEBALL CARDINALS' PHYSICIAN IS PHYSICIAN/ ATHLETE



Shively says, "In little league wrestling, for example, a 14-year-old, 140-pound boy who has to wrestle a 12-year-old, 140-pound boy can be so different in maturity that the contest is really man against boy."

discovered. But a good examination can detect overt life-threatening conditions such as heart or lung problems."

For young teenage athletes and their safety in participation in some contact sports, Shively recommends that the athlete be compared with others of his or her age, not only in weight, but also in terms of physical development following the onset of puberty. This is an approach that is rather recent, Shively says. "In little league wrestling, for example, a 14-year-old, 140-pound boy who has to wrestle a 12-year-old, 140-pound boy can be so different in maturity that the contest is really man against boy. Kids, eight to 10, or 16 to 19, can be matched fairly safely on the basis of weight alone, but that group in the middle, from ages 11 through 15, can show great differences in muscle mass and bone development."

Recognizing that children don't go through puberty at a uniform age, New York State separates junior-high school students according to muscle development, not just age or weight. During a five-year study supervised by Lenox Hill Hospital's Institute of Sports Medicine, reported in *American Health*, more than 6,000 children were promoted to older teams after a battery of physical and performance tests were performed, including checking for pubic hair in boys, and determining the number of months since menarche for girls.

When it comes to pre-season physical exams, the professional player has the edge. For example, internist Bernard T. Garfinkel, M.D., clinical professor of medicine, examines the Football Cardinals, and the tests include blood work, cardiograms, stress tests, and joint x-rays. Garfinkel is on the staffs of Barnes Hospital and The Jewish Hospital of St. Louis. Ginsburg conducts the orthopedic aspects of the exam, looking for stability, effusion, and degenerative changes in shoulders, elbows, knees, ankles, and the spine. Few amateurs' pre-season exams involve two specialists. And most of the pros report for the exams in good physical condition.

Amateurs and children can help themselves by conditioning themselves for the season, with stretching, calisthenics and jogging, as well as practicing the needed skills. "But excellence at a sport should not be the primary goal," Shively says. "More than the physical benefits, sports can be a lot of fun. I've been involved in sports all my life, and I've had some of the best times of my life associated with sports. I don't care whether my children are All-Stars or not. I wasn't. I want my children to have the same kind of fun that I had, and still have, in sports. If you live 10 years longer because you're in good condition, that's awfully nice. But if you're having fun, that is the most important. We adults should never lose sight of the fact that sports are for kids to have fun."

During his undergraduate years at Washington University, young Stan London played baseball and basketball with the battling Bears. He was an All-America basketball player, and was offered professional contracts in both sports. London didn't "go pro"; he went to medical school at Washington U. His interest in sports did not wane, however; he coached the W.U. baseball and basketball teams while working toward the M.D. degree, which he earned in 1949.

London eventually entered practice as a general surgeon, associated with the late Dr. J.C. Middleman, who was physician to the St. Louis Baseball Cardinals. After Middleman's death in 1968, London continued to be physician to the ball club. Sports injuries to pros and amateurs of all ages constitute "a major part of my practice," London said. He is on the staff of The Jewish Hospital at Washington University Medical Center, and is clinical assistant professor of surgery at WUMS.

According to London, the most common baseball injury involves pitchers' arms. "Pitching is a very unnatural motion. Throwing underhand is a much more natural action," London said. Overuse of the shoulder can cause inflammation and swelling of the muscles, tendons, and ligaments within the joint. Swollen tissues crowd each other, and the impingement can lead to rotator cuff erosion and other inflammation. The unnatural pitching action can also cause stretching of the inside of the elbow, and compression of the outside, jamming the lower arm into the socket of the upper arm. The erosion caused by throwing breaking balls can lead to inflammation and swelling, cartilage damage and chips, spurs or other loose bodies, and tearing of tissue.

Good conditioning is good preventive medicine. London goes to Spring Training with the St. Louis Cardinals to work with the club's trainers and coaches. The professional baseball players have a regimen of running, calisthenics, hitting and throwing, enabling each man to build his stamina and strength to a peak before the season begins.

HOCKEY BLUES' PHYSICIAN ON SPORT MEDICINE'S GOALS



Sports injuries to pros and amateurs of all ages constitute a major part of Stan London's medical practice. London, M.D. '49, is team physician for the St. Louis Baseball Cardinals.

"Amateur conditioning," London said, "usually depends on the degree of fitness that the individual player wants to attain." Usually, their goals could be higher. "If you go out onto the field of play once or twice a week, and the game gets exciting, you will over-extend your body to meet the situation. In many instances, the amateurs cannot do so safely and they wind up with sprains, strains, bruises or broken bones." London advises that amateurs should be especially careful to avoid overusing their arms. "Teens, especially, should be limited in how many pitches they throw per week — including the times they go out in the yard and play catch with their Dads or their buddies. They should not throw more than sixty pitches in any week." London also recommends that young teenagers not be allowed to throw breaking balls during league competition. "Their bones are not mature enough. The breaking ball action can damage the bones and growth plates."

For London, one of the best features of being a physician for the Cardinals is working with healthy people, preventing injuries and health problems among professional athletes who are motivated to remain at peak fitness levels. "It is quite a change from a hospital environment to a stadium environment," he said. He observed that professional athletes have

"special personalities, and it is a pleasure to get to know them and their families, to become friends with them. That drive to win which distinguishes the professionals, their attitude and determination, are good to be around."

The professional attitude toward winning is, for amateurs and children "a terrible mistake," London said. "Kids, no matter what their sport or level of talent, should have fun and learn the game." There is plenty of time for the intensive competitive spirit later on, if the person has the talent and ambition. "For too many amateurs and parents, there is too much emphasis on winning, and too much pressure."

London is so sensitive to the potentials of parental pressure that he avoided attending his own children's competitive events when they were growing up. "I usually really wanted to go, but I thought they would feel too much pressure if I did." London's youngest, who has recently completed college, played baseball from little league on. His other son plays handball, and his daughter is an equestrienne and golfer. London plays handball and has won some championships in the sport. "But sports, for me, have always been a release, a form of relaxation, a lot of fun." (Casey Croy) ■

"I never was a good skater," said Jerome J. Gilden, M.D. '52, who is to the St. Louis Blues hockey team what his partner, Jordan Ginsburg, M.D., is to the Football Cardinals. "I played soccer as an undergraduate at Washington U. and in basketball, I mainly sat on the bench and watched Stan London play."

Like London, his former teammate and fellow alumnus, Gilden was attracted to sports medicine. When Sidney Salomon bought a professional hockey team, dubbed them the St. Louis Blues, and took over the Arena in 1967, Gilden treated his first professional athlete. "J.G. Probst (clinical professor emeritus of surgery) was chief of surgery at Jewish Hospital and physician for the team," Gilden said. "He gave me my first consultation request, and I've been with the Blues ever since."

As an indication of the increased importance which owners, coaches, and players place on sports medicine, Gilden points out that "the Blues now have four people doing what Probst used to do by himself." Others on the Blues' sports medicine team include Aaron Biernbaum, M.D. '48, internal medicine; dentist Leslie Rich; and surgeon Ronald Gaskin, M.D., who cares for the visiting teams at Blues home games.

"Sports medicine has been growing and changing for years," Gilden said. "Basically, it is like treating all of humankind, but professional athletes require a different orientation than the general population of patients." The field of sports medicine includes physicians and surgeons, therapists, trainers and other support personnel who understand professional athletes, their motivation, and their needs for physical care.

"The pros," Gilden continued, "have a strong motivation to return to full activity as soon as possible. They put forth a concerted effort, and they expect an equally concerted effort from the physician. We work toward good progress in returning to activity, carefully balanced to avoid sacrificing the individual or short-circuiting the primary goals of treatment."

Through the years, the length of time between injury and return to activity has been shortened, not only for pro athletes, but for other patients as well. "This reorientation of philosophy toward earlier rehabilitation is based on the experience of sports medicine," Gilden said.

"Patients have always tested their doctors. For example, kids will return to regular activities much sooner than the doctor allows, but they won't admit it. Sometimes, this premature activity is harmful. When we reviewed the rapid progress of professional athletes and the early-return kids who did not have poor results, we realized that we had been very conservative in scheduling rehabilitation and allowing resumption of activity."

Gilden recounted his first experience in treating a professional athlete: "His motivation to return to play, his overall good physical condition, plus the treatment, enabled him to return to play in a third of the time that I had expected."

The major differences between professional and amateur players are that the pros usually keep themselves in better physical condition, are masters of their

sport, are "psyched up" for the game and about their team, and feel responsible to the fans. Gilden's philosophy in treating injured pros is "to remember that the patient is an important human being, not just an important player. So, whatever we do, we must think about his long-term future, not the expedience of the next game." He said that the Blues organization has always endorsed his approach.

Because the player's confidence in his own abilities and physical condition is such an important element of being psyched up, the player must have confidence in the physician, whether the physician's judgment is that the player can return to full activity, or only to partial activity. Yet, the pro athlete's doctor is part of a sports medicine team, which includes trainers and coaches. "The trainer is the basic link in the whole system. And I think that, in general, they're underpaid, overworked, and underappreciated," Gilden said.

Once he became known as "The Hockey Doc," Gilden said, he began to see an increasing number of amateur players and skaters as interest in hockey grew

and amateur leagues were formed, even for children as young as third grade. "Facial lacerations used to be the most common hockey injury in kids, but now they have to wear protective masks and we see very few lacerations. Mostly, we see soft-tissue injuries and bruises. Hockey generates fewer knee injuries than football. And we see some shoulder and ankle injuries from falling on the ice or crashing into the boards around the rink."

Gilden firmly believes that hockey is safer than football, although it gets "bad press" about game-stopping fights. Hockey is an intense, one-on-one contact sport which, Gilden says, "is emotionally frustrating." Kids tend to start fights because they see them at pro games. "Kids, especially teenagers, must be modulated by intelligent coaching to learn the ethics of the game," Gilden said. Fights are not part of hockey ethics. "The pros are not out to hurt anyone. They never want to cause serious impairment to another player. There are good, clean ways of performing defensive moves. Fights get started if players don't play clean." Gilden added that it is common for players involved in a play in which another is injured to visit the injured man in the hospital, to apologize and cheer him up. "Most of the hockey pros are examples of good sportsmanship." Gilden also described hockey pros as "very nice, friendly young men. Most of them are from small towns, and they have a 'good-neighbor' way about them. There is a pleasant and warm culture in the hockey world, with nice, friendly people."

Gilden believes that playing hockey poses no great risk to children as young as third grade. The process of learning to skate is also a conditioning and strengthening process. "Even if these young kids can handle the skating, they are usually too slow to be at risk of injury from knocking into the boards or falling down. As long as parents don't put their own goals on kids, they can learn to skate and play hockey, and have a good, safe time of it." (Casey Croy) ■



"Hockey Doc" Jerome J. Gilden, M.D. '52, is team orthopedist for the St. Louis Blues. During home games, he is frequently called upon to conduct examinations between periods. Here Gilden is determining the severity of defenseman Joe Mullen's broken nose.

HIGH SCHOOL TEAM PHYSICIAN IS A REAL FAN

Charles Mannis, M.D., is an orthopedic surgeon, sports medicine specialist, and a real fan of his patients — the teams at Clayton, Ladue and DeSmet high schools. "I go to the games because I like to see the kids play. I know them, and the coaches and parents. I'm a fan."

Mannis, clinical assistant professor of orthopedic surgery at WUMS, and staff surgeon at Jewish Hospital, has been involved in sports medicine for six years. He is advisor to the sports medicine committee of the Missouri State Highschools Activities Association, and is St. Louis area medical advisor to the group's Sports Commission. He is also medical advisor for the midwestern region of the National Athletic Trainers Association, part of the American Orthopedic Society for Sports Medicine.

The sports medicine subspecialty is approximately 10 years old, but, Mannis says, "its biggest growth has been over the last five years." There are now approximately 350 members. In the St. Louis area, the group is trying to establish physical conditioning standards which would be common throughout the metropolitan area. "This is a tough project to implement because there are so many independent school districts," Mannis said. The sports medicine subgroup is also trying to organize and conduct seminars and workshops for school coaches to increase their awareness of common problems and to teach conditioning for injury prevention.

"There are three important aspects of conditioning," Mannis said. "These are flexibility, muscle strength and tone, and cardiovascular capacity. All three must be emphasized equally. Too many coaches tend to emphasize one over the others, depending on their personal beliefs. But all three are equally important, if a player is to be a well-conditioned athlete."

Mannis praises the coaches with whom he works for their emphasis on conditioning and for their cooperation in treatment of any injured players. "They know that the game is not the career of their players.



Charles Mannis, M.D., is a sports fan as well as a sports medicine specialist. He works frequently with high school athletes from Clayton, Ladue and DeSmet varsity teams. Mannis says most teenage athletes are compliant, listen to their physician, and do whatever is necessary to recover from an injury.

If a young athlete seems to have the potential to be a pro, the high school coach should protect that potential."

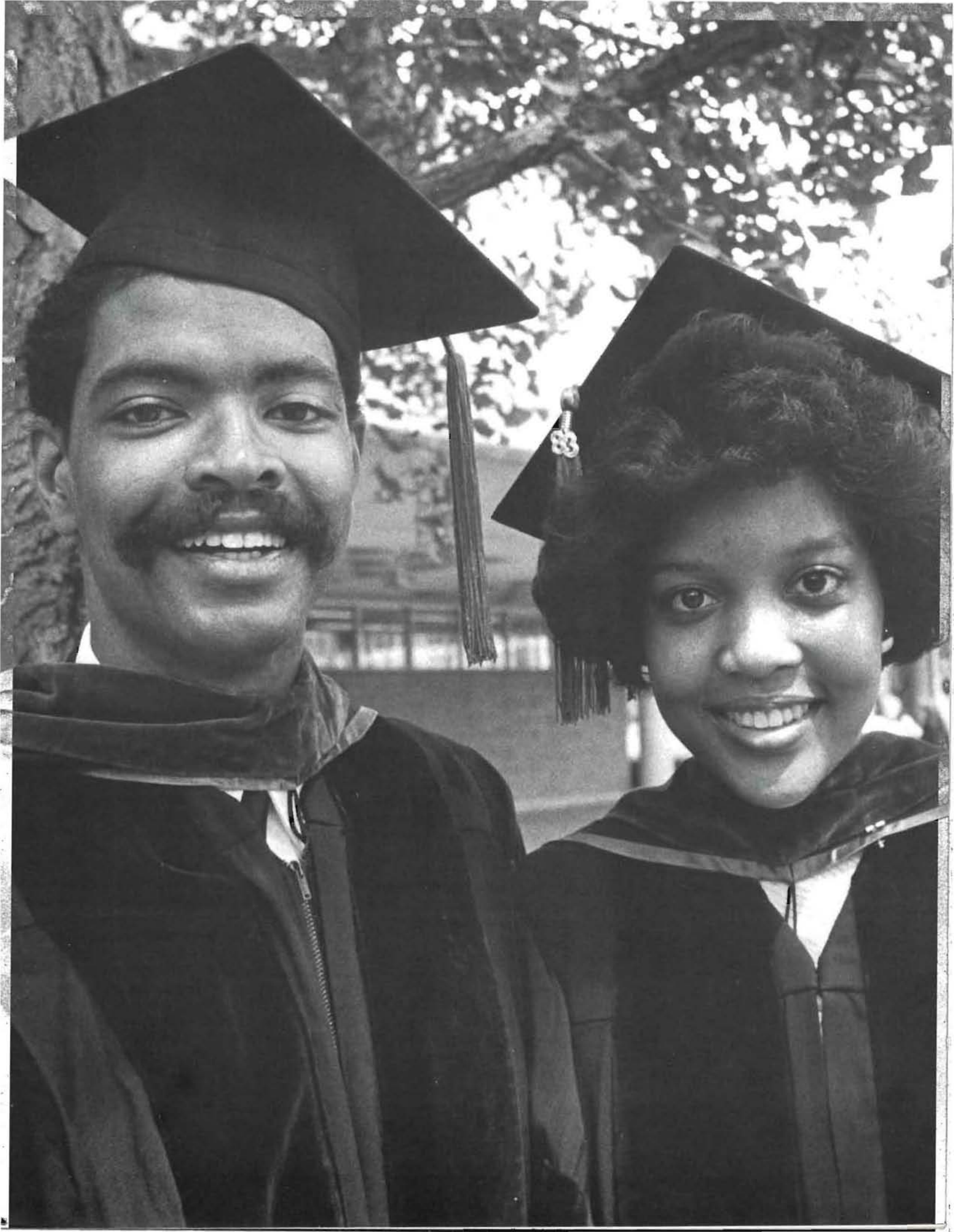
Mannis, three physical therapists, and the high school coaches with whom he works cooperate in an innovative conditioning program. Before the end of the school year, Mannis and the therapists examine each team member, looking for problems in strength and flexibility which could result in injury during the next season. "We then work up a conditioning program for the boy to follow through the summer. This showed some improvement in injury prevention when it was done in the Clayton school district." Mannis and the physical therapists spend three evenings per team conducting the evaluations and instructing athletes in conditioning. "One of the advantages of treating this age group is that they listen, and they do what is necessary to get in better condition or to get well after an injury," Mannis says. "Young adults in their mid-twenties are not nearly so compliant."

To the general rule of thumb that the more contact there is in a sport, the greater the risk of injury, Mannis adds a caveat about gymnastics, an increasingly popular competitive sport for girls. "Most girls get into it without realizing the po-

tential danger. Novices won't usually get into much trouble, but when they begin to become advanced, they push too hard and get overly aggressive." More than the risks of falling from the balance beams or bars is the risk of spondylolistheses, a stress fracture of the lower back caused by hyperextension of the back. "This occurs in, at the most, 15 percent of the general population, but it happens in probably 35 percent of the gymnasts," Mannis said. "Immature bones are susceptible to it. With a growing number of girls between the ages of 10 and 16 competing in gymnastics, there is a growing need for more awareness of the risks and for improved training. More attention needs to be paid to the stresses gymnastics forces on the immature skeletal structures of these kids."

Entering its second decade, the subspecialty of sports medicine continues to grow. The specialists are moving aggressively downfield, out of the treatment room and the operating room, and into the classroom. The focus for the next decade is on educating pro and amateur players, coaches and parents and fans in the value and methods of injury prevention for more fitness and fun in sports. (Casey Croy)

B Y C A S E Y C R O Y



Washington University because I wanted to stay in St. Louis," Mosley said. "I also applied to Missouri University, Northwestern, Chicago, and Southern Illinois U. because they're not too far away from St. Louis. And I applied at the traditionally Black schools, Howard and Meharry. I thought I had some chance of getting into Washington U., but a better chance at some of the others. The first one to accept me was Washington U., although eventually I was accepted at all eight. What surprised me about WUMS was that the acceptance was so swift."

Mosley's interviews with the admissions committee, and subsequent acceptance, were not his only interaction with the committee. He was asked to help with the committee's efforts to find and enroll more Black students, and he became an important part of the early efforts to initiate the minority program. After Mosley entered in 1968, he was followed by three Black students in the Class of '73, four in the Class of '74, and seven in the class of '75.

The effort for minority students began with more than one hundred interested faculty members actively involved in learning how best to find and serve minority medical students, how to seek, select and support them. To change the School's image among Blacks, Dean M. Kenton King, M.D., established a committee drawn from the one hundred faculty. "We were getting our feet wet," Herweg said. "The faculty had to learn that students are a very heterogeneous group, with varying needs and abilities. We had to become more flexible and less rigid than we had traditionally been." Remember that even into the late 1950s, it was common for entering medical students at some U.S. schools to be informed that a third of them would be dismissed within the year. Slowly the philosophy changed from threatening students with failure to expressing an institutional commitment to the students accepted. Into that philosophical shift, which certainly rattled at least a few branches in the groves of academe, came



Left to right, Julian Mosely, Associate Dean John Herweg, Vickie Lee Shannon, Donald Keith Wilkerson and Assistant Dean Robert Lee.

the advocates of minority students rattling a few more branches.

The committee determined what students' needs were, and many old approaches to medical education were modified. "We became more flexible," Herweg said. "For example, if students needed more time in the first year or two, which happens occasionally for personal reasons, health reasons, academic reasons, or a mixture of reasons, we decided to support the students, allowing completion of the first two years of course work

Faculty came up with that amount of dollars for our medical students. There was never an amount specified for minority students. For each student, we try to meet the documented need for financial aid. The one hundred faculty members most interested in the program contributed money for financial aid and the expansion of our scholarship funds. One of them gave \$3,000, which was an impressive gift." Dollars demonstrated commitment.

One phase of increased flexibility was extra academic assistance. Faculty and students set up a program of individualized instruction available to any student having difficulty with the heavy load of basic science courses required in the first two years. Karen Scruggs, M.D. '73, and Julian Mosley, M.D. '72, were not only recruiters but later became tutors. "Julian and I and some other students and some of the faculty got together and proposed a tutorial program so that students could get extra help if they felt that they needed it," Scruggs said. "It proved to be very popular and helpful to all who used it."

Herweg added: "We realized that some of our minority students had not had the educational opportunities, and other opportunities, that are more readily available to non-minority people and to the more affluent people of any race. When

"The greatest good for a minority of one generation may be the greatest good for the greatest number in the long run."

— Oliver Wendell Holmes, Jr.

to be done within three years. We began listening to our students' needs and responding to them."

One of the most common needs was, and is, financial. "We set out to determine what students need, not just what minority students need," Herweg explained. "We determined the extent of need for financial aid. The Dean and the Executive

the individualized instruction program began, we soon learned that many students of all races and backgrounds took advantage of it. Some of our students found themselves in academic difficulty for the first time in their lives. They were relieved to find out that help was available and that it was OK to use it."

Lee explained: "In any population there is the normal distribution curve, with most of the population in the middle and a few on either the high end or the low end. Our minority students follow the curve. For all of the students on the low end, tutorials are available and the students are expected to take advantage of the program. This faculty," Lee emphasized, "will not graduate any students who do not deserve it. These programs have been used by young people of all races, by faculty kids and Ivy League grads and students who have become used to being tops in their classes. This is not an easy medical school. We are committed to our students, and individualized academic help is just one way that we show that commitment. We have very high expectations of our students and of our graduates."

The seven Blacks in the class of '75 were followed by a dozen more who entered in 1972, the year that the School hired Robert Lee, Ph.D., to be Assistant Dean for Minority Student Affairs. He had been assistant director of admissions at Illinois State University, Normal, before coming to WUMS to establish a recruiting and retention program for minority students. Lee's bachelor's degree from the since-renamed Harris Teachers College, a traditionally black institution in St. Louis, is in education. He has a master's degree in counseling from the University of Missouri at St. Louis, and a Ph.D. in counseling from the Department of Education, St. Louis University. In the late 1960s until 1970, he was a teacher and vocal music specialist in the St. Louis public schools. He indulges his musical talents by being organist for the Murchison Tabernacle Christian Methodist Episcopal Church.

Lee developed the recruitment plan which has resulted in 70 of the School's Black graduates, and the current enrollment of 53. Lee uses the MedMAR (Medical Minority Applicant Registry) in which students can opt to have their names listed when they take the MCAT exams. The computerized list of nearly 4,000 names shows the students' schools, majors, and MCAT scores.

Lee set up and maintains a schedule of recruiting visits to schools. He established personal contacts and correspondence with pre-medical advisors, asking what Washington University School of Medicine could do to interest their students. He published a brochure about minority medical education at WUMS, and developed posters with detachable reply cards. "When we travel, we visit the traditionally Black institutions, and we visit others as well. We use the MedMAR to plan recruiting trips." Third- and fourth-year medical students help

"There are two ways of exerting one's strength: one is pushing down, the other is pulling up."

—Booker T. Washington

with recruiting, as did Julian Mosley before Lee came to coordinate recruiting.

Washington University's minority program has focused primarily on Blacks, although the AAMC defines minorities as also including Alaskan and American Indians, Chicanos or the Spanish surnamed, and Mainland Puerto Ricans. "We have not had much success recruiting Chicano and Indian students," Lee admitted. "We have attracted a few, but geography is against us. There is not a strong Chicano or Indian population and culture base in the Midwest. When students are looking at opportunities for graduate education, it is often hard to leave the region where one's own culture is strong," Lee said. "For example, I

have a friend who lives in Utah. There are very few Blacks in Utah, so I would not personally want to live there, to move my family there. I'd wonder about what friends I could find, or what support groups there might be. I suppose that everyone has those kinds of concerns about moving somewhere for their education or careers."

"We are concerned about all minority groups," Associate Dean Herweg said, "but we have emphasized Blacks in our program because they are the largest minority group in St. Louis and in the Midwest." Starting a new program involves facing many obstacles; adding the unnecessary geographical problem was wisely avoided. "We could accomplish more for minority medical education by trying to appeal to those most likely to enroll," Herweg said.

So the effort for minority medical education has passed its 16th year and bestowed its 101st diploma. "Starting this effort was an expansion of our commitment to recruit, enroll, educate and graduate medical students," Herweg summarized. "We were then, and still are, committed to the goal that minority students be represented in our student body in proportion to their numbers in the general population. This means a goal of enrolling 14 or 15 minority students a year. Some years we get that many, and some years we don't. We never know for sure until registration day. We are committed to support those who need financial aid. We are 'doing our thing' — educating medical students.

"We on the Admissions Committee have to believe that each student admitted will be able to succeed here, in this school, with this curriculum," Herweg continued. "The faculty and administration are committed to providing the necessary academic, financial, and support systems. We believe that our graduates will serve, in an exemplary fashion, their patients, the medical profession, and society as a whole."

MEDICINE & THE



Norris K. Smith

For more than 25 years, art historian and professor Norris K. Smith taught undergraduates at Washington University. Many of them use words such as "provocative," or even "infuriating," to describe his methods. He was known around campus for bicycling to work wearing, always, a suit and tie. The bicycle, he said, "was for the exercise, but partly because we couldn't afford a second car and partly as a protest against pollution by exhaust fumes." The suit was de rigueur because teachers should never make casual impressions. Smith is professor emeritus now, and a mini-farmer near Owensville, Missouri. He grew up in Little Rock, Arkansas, and was educated on full scholarship at Columbia University. He taught there and at Hunter College before joining the WU faculty in 1956.

Smith opened the 1982 "Medicine In Modern Society" course in his own irreverent, controversial way, quickly filling Moore Auditorium with a nearly tangible tension as preconceived notions, general assumptions and long-held aspirations came up against the sharp wit and mind of this teacher who not only sparks ideas but inflames passions. Course-master Hugh Chaplin, Jr., M.D., received many requests for transcripts of the lecture. Professor Smith wrote the following article for Outlook Magazine based on the lecture, which he calls "that medical harangue."

When Dr. Chaplin asked me to give this opening lecture, pinching for Chancellor Danforth, who was out of town, I was quite at a loss to know what to talk about; as a retired art historian, I can claim no medical expertise whatsoever. Shortly after I received the invitation, however, there came into my hands a little volume entitled *Der Arzt als Führer der Neuzeit* (*The Doctor as Leader of the New Time*). It had been written by a summa cum laude graduate of the medical school of the University of Munich, one Dr. Julius Lingenfelder, who emigrated to the United States in 1892, married a St. Louis woman, and lived for several years in Hermann, Missouri. The book was published in Berlin and New York in 1933, but it was not a best-seller: copies are being given away this summer to any German-reading visitor to the restored Klenke House in Hermann. Since it is not an especially good or interesting book, don't drive eighty miles to Hermann to get a copy.

Dr. Lingenfelder knew that he was living in critical times. (The book was published just as Hitler was coming to power, though the author's use of the word *Führer* has nothing to do with Nazism.) As he says in an early chapter called "Sickness and Corruption," "Our whole epoch is sick!" He declares that mankind is in need of recovery and redemption, and he looks to the physician, "good and experienced, already the people's best friend," to assume leadership in achieving that redemption — though in fact he has very little to say about the practice of medicine or about any specific course of action that doctors might pursue in order to bring about our collective redemption. Much as Thorstein Veblen believed that the well-trained and disinterested engineer was the kind of man who should be entrusted with the conduct of human affairs, so Dr. Lingenfelder thought it was the doctor who can be expected to heal the maladies that beset us. Veblen, like most modern reformers, was confident that the engineer

NEW TIME

by Norris K. Smith, Ph.D.

could formulate our difficulties as problems and then solve those problems; Dr. Lingenfelder believed that they could be diagnosed as sicknesses for which physicians could then devise therapies. The two men shared a conviction that, according to Philip Rieff (*The Triumph of the Therapeutic*), is peculiarly characteristic of Western thought in the twentieth century: to wit, that whatever seems to be causing distress, in the body politic no less than in the mind and body of the single person, can and should be cured by an appropriate therapy.

Well, today we are exactly fifty years further into that New Time. During those years the quality of medical care and the delivery of "health services" have burgeoned and improved in ways the good doctor could not even have imagined in 1932. Even in the midst of economic recession medical services are increasingly in demand, almost without regard to cost. Yet I should like to invite you to pause, here at the beginning of your careers as doctors, to consider the possibility that the progress and goals of modern medicine are perhaps proving to be less salutary than we have all been led to believe.

Having devoted much of my adult life to reflecting upon works of visual art, I have come to be greatly concerned with men's idea of the *imago hominis*, the image of man. I share Jerome S. Bruner's opinion as to the "social, ethical, and political significance of this image, for it is patent that the view one takes of man affects profoundly one's standard of the humanly possible. And it is in the light of such a standard that we establish our laws, set our aspirations for learning, and judge the fitness of men's acts." It is on the basis of that image, I would add, that we shape out our conceptions of health and well-being. So let us consider today a few aspects of the relation between the *imago hominis* and the nature of modern medicine.

Let's begin with this engraving of Adam and Eve, or "The Fall of Man," that was made by Albrecht



Dürer Albrecht, 1504, Engraving, "Adam and Eve."

Dürer in Nürnberg in 1504. As you can see, our Grand Parents (as Milton calls them) have not yet eaten the fruit, which the serpent still holds in his mouth. They are still perfect and unfallen. These are the most perfect images of the human body that Dürer was capable of devising, on the basis of years of studying the proportions of the male and female figure. At the feet of Adam and Eve we see four animals, a rabbit, a cat, an elk, and an ox. They are included in the scene because they symbolize the four humours or temperaments that had long been held to be characteristic of imperfect and fallen men, creatures in whom the original balance among the fluids of the body had been upset by corrupting sin. The four fluids were blood, yellow bile, black bile, and phlegm, while the four corresponding humours were the sanguine (the rabbit), the choleric (the cat), the melancholic (the elk), and the phlegmatic (the ox). Those, in turn, were related, in Renaissance cosmology, to the four times of day — dawn, midday, twilight, and night; to the four seasons of the year — spring, summer, fall, and winter; to the four directions and the four winds; to the four rivers of paradise and the four rivers of the underworld; to the hot, the cold, the wet, and the dry; and so on.

In Dürer's day, that cosmology was an important factor, or set of factors, in the theory and practice of medicine. Insofar as fever and chills, dryness and sweating, were (and still are) among the most elementary symptoms of a diseased condition of the body, and since those four conditions could be related in the old cosmology to all those other quadral groupings, the treatment of "dis-ease" (that is, of the patient's being in a state of disharmony with his ideal self and with the universe) involved philosophical and theological considerations of the grandest dimension. Today we have every reason to believe that what doctors did, on the basis of such thinking, had little if any therapeutic value; fortunately for them, many diseases are naturally self-limiting. On the other hand, their procedures did much to sustain men's conviction as to the dignity and importance of us creatures, made in the image and likeness of God. Sickness entailed a falling away that could be related to the aboriginal Fall; it was an ethical and spiritual condition, not merely a physical one.

Let me show you two *imagines hominis* that will give you some notion of the effect or consequence of holding those old beliefs. The first is the detail from Michelangelo's painting, on the ceiling of the Sistine Chapel in Rome, of "God Creating the Sun and the Moon." Michelangelo was a slightly younger contemporary of Dürer; the fresco was painted some six or seven years after Dürer made his engraving of "The Fall." For my own part, I am convinced that this is the noblest, grandest, most heroic and transcendent image of the human body, or of the eternal archetype of that body, that has ever been made. It sets for us a daunting and awesome standard as to the meaning of well-being — that is to say, as to what it would truly mean to be human *well*, a very different thing from "being well" in the medical sense in which we use those words today. What we mean now by "well" is only an absence of disease; the word has no positive force — it does not lay upon us an



Michelangelo, "Creation of the Sun, Moon and Planets," Detail of Sistine Ceiling (Mariani, "Mich The Painter," p. 19).

obligation or convict us of inadequacy and failure.

Much the same idea underlies this portrait of Dürer himself, which the artist made in 1500, a year of millennialistic fears and forebodings. Here Dürer portrays himself in the guise of Christ. You will find it said in bad textbooks that this was an arrogant, even blasphemous thing for him to have done, but that is not at all the case. Instead, the artist was saying, "This is the true image of the man I was created to be, the image in terms of which I must judge myself." The painting is small in size; plainly it was made to hang on the wall of Dürer's living room or studio, so that he might be reminded every day of what it would mean to be in right accord with himself and with the whole of creation. He took that ethical obligation very seriously indeed: he is reported to have been as virtuous an artist as ever lived — kindly, generous, helpful, charitable. But it was the form of his body as image, made *in imagine dei*, that laid that obligation upon him.

During the past hundred years — that

is, during the period that has seen the triumph of modern science and modern medicine — all that has changed. Here, for the sake of comparison, is a modern image of Adam and Eve, an early work of Marc Chagall entitled "Temptation." It



Chagall, "Temptation," 1912, St. Louis.



Michelangelo (ca 1515) Moses. San Pietro In Vincoli, Rome.

was painted in 1912 and is now in the St. Louis Art Museum. Again we see Adam and Eve with the serpent, although their presence has to be puzzled out, for neither the form of the figurines nor the meaning of the event is at all obvious. What we see is a pretty painting, sensuously appealing but hardly provocative of thought. So far as I can tell (and I have known the painting for twenty-six years) it was not meant to have any bearing upon the human condition, except that it invites us to enjoy the purely experiential aspects of seeing. One might say that Chagall has transformed the story of the Fall into an imaginative fairy tale, but in so doing he has trivialized both the story and the image of man.

Sixty years later we come to a really modern Adam and Eve, but now the mythic dimension is wholly absent; the *imago hominis* has been totally "demythologized." These are fiberglass sculptures that were made in 1972 by John De Andrea. They are works of incredible verisimilitude, yet I think it fair to say that the figurines confront us with no image of *man* (or of *woman*); instead, we see two particular "individuals," as we are wont to say, in whose existence there is exemplified no governing idea or ideal, no standard or norm. It does not occur to

us to wonder whether or not they are man and wife, for the civilizing institution of wedlock is an irrelevancy (as many young people today are finding it to be). Though the work might be called "Post Coitum Triste," De Andrea has rightly indicated his meaning, or the work's meaninglessness, by entitling it "Arden Anderson and Nora Murphy." The bodies are as well formed, I suppose, as are those of Dürer's Adam and Eve, but all those old ideas, ideals, traditions, ethical concerns, and cosmological implications have been purged away, leaving only two naked bodies lying on a rumpled bed.

Have doctors brought us to this pass (if indeed you consider it to be a "pass")? Well, yes and no. Obviously a work such as De Andrea's could not have been exhibited publicly or published in leading magazines a hundred years ago. Arden and Nora plainly belong to a generation that has been liberated from the "taboos" and "hang-ups" and "guilt trips" that are widely thought to have been consequent upon the "Victorian" and "Puritanical" mores of our forebears. To some extent the old restraints were no doubt enforced by fear of pregnancy and of venereal disease, and those fears have been allayed by way of antibiotic drugs, contraceptive devices, and abortion on demand. In the belief that the doctor should be a wholly non-judgmental scientist, physicians have in effect, whether intentionally or not,

done much to facilitate the "life-style" of the Ardens and the Noras among us.

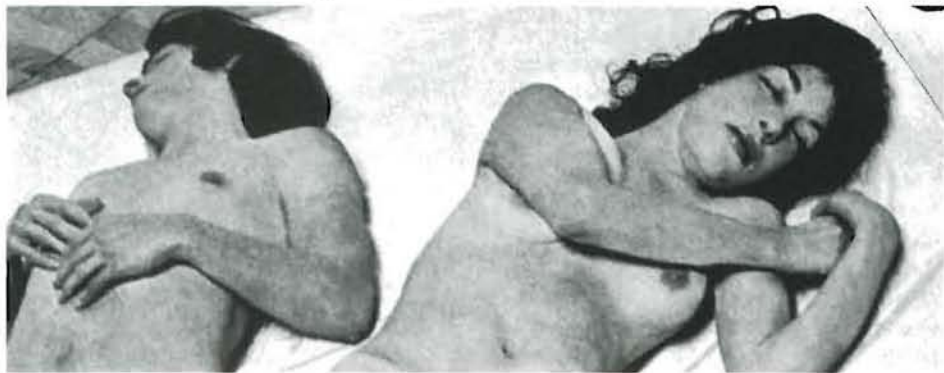
But of course there is more to it than that. Much of what we are witnessing today was predicted a hundred years ago by Friedrich Nietzsche. In his book *Thus Spoke Zarathustra* (1883) Nietzsche averred that in the coming century (that is to say, in our own time) two kinds of person would predominate, Nihilists and Last Men. The Nihilists would commit acts of meaningless violence and, as do so many modern artists, would repudiate the very notion of meaningfulness; but the majority would be Last Men. The Last Man, as Nietzsche describes him, is sardonic and whimsical, skeptical and uncommitted. He cares mainly about two things, good health and having fun. (I need hardly remind you of the fact that the two classes of persons who have enjoyed the most spectacular rise in both income and social prestige in our time have been doctors and entertainers, for whose services we are willing to pay untold billions every year.) Nietzsche even foresaw the importance that narcotics would have for Last Men: "A little poison now and then: that produces pleasant dreams. And a lot of poison at last, for a pleasant death." Drug addiction was already a familiar phenomenon in Nietzsche's day, though not so much of a problem as to require that the full force of the law be hurled against it. But if he had known of its existence, Nietzsche would



Rembrandt, "Self Portrait," 1658. Frick Collection.

surely have predicted that marijuana would prove to be the Last Man's drug *par excellence*, what with its power to induce a state of dreamy indolence and irresponsibility.

Evidences of the Last Man mentality are easy to find today, in manifestations ranging from Playboy Magazine to television-cum-video games. If I were asked to illustrate the diametric opposite of that mentality I might choose Michelangelo's great statue of Moses (ca. 1515) or, perhaps even better, this self-portrait that Rembrandt painted in 1658 and that now hangs in the Frick Collection in New York. The artist was fifty-two at the time. Not long before, he had had to declare bankruptcy: in 1656-57 all his worldly goods were sold at auction, whereafter he lived in semi-poverty for the rest of his life. With the possible exception of Dürer's image of himself as Christ, it is, I believe, the greatest self-portrait, the profoundest meditation on our personhood, that any artist has yet produced. It



A detail from De Andrea's "Arden Anderson & Nora Murphy," 1972.

is as if Rembrandt were an Old Testament king — perhaps King David in his old age, after all the battering by fateful adversity he had had to undergo. Rembrandt's majesty had nothing to do with wealth or position, however; it resided in what we call *character* and in an awareness of the tragic nature of human destiny.

I am persuaded that much of the nobility we see in his face depended upon his having had to cope repeatedly with death. He had had two wives. The first, Saskia van Uylenburgh, had died of a pulmonary disease in 1642; the second, Hendrickje Stoeffels, died in 1664 in the course of an epidemic of the plague that afflicted Amsterdam in that year. He had had some five or six children, all but two of whom died in infancy or early childhood. By the time Rembrandt died at sixty-three, his son Titus had died (at twenty-six) and he was left with only a thirteen-year-old daughter and an infant granddaughter. If modern medicine had been available at that time, all those deaths would probably have been prevented, and Rembrandt might well have died, not at sixty-three but at eight-eight or ninety-one . . . but would he have been the man we see here? Would he ever have been able to develop within himself the wisdom, the tragic nobility, the grave sense of the high seriousness of human being that are revealed in this portrait? Though artists of comparable talent may conceivably be alive today, the context within which they and their patrons find themselves make for just the kind of trivialization that Nietzsche foresaw. Can anyone say with confidence that the wonders of modern medicine have not contributed to that trivialization?

On two occasions during his life Rembrandt was commissioned to paint a portrait of a group of doctors. The second of these group portraits survives only in a damaged fragment, but the earlier one, known as "Dr. Tulp's Anatomy Lesson," may well be the most famous "medical" picture of all time. The portrait established Rembrandt's reputation as the preeminent portraitist of his day, though



Rembrandt, "Dr. Tulp's Anatomy Lesson," 1632, Mauritshuis, Den Haag.

he was only twenty-five when he received the commission. Actually the men who are gathered around Dr. Tulp are not medical students; they are younger physicians who are there to learn from an older and wiser anatomist. The painting, which was made for the doctors' guild hall, was intended to show how doctors belong to a professional class of wise, sensitive, learned, and nobly humane men. Needless to say, such images are wholly foreign to the realm of medical association today, no less than to the domain of modern art.

As a matter of fact, much of what Rembrandt professes survived until fairly recently. Here is another medical portrait, "The Gross Clinic," painted by the great American artist, Thomas Eakins, in 1875. Dr. Gross, surrounded by students and operating-room personnel, is the man in formal clothing. Doctors did not then wear white smocks or sterile green O.R. dress; it was more important that they should seem to be gentlemen than to be neutrally antiseptic. Look closely at Dr. Gross's face (which is not concealed behind a gauze mask). He is still the kind of man one sees in Rembrandt's portraits. His humanity, his dramatic individuality, his *presence* dominate the scene. Eakins

had the highest admiration for Rembrandt, of course, and felt no shame at working within an old and continuing tradition of art and thought.

One may ask, of course, "But did Dr. Gross's patient survive?" I do not know, though I am sure that his chances would have been much better today than they were in 1875. But is that the all-important consideration? One of these days some-



Thomas Eakins, "The Gross Clinic," Philadelphia Museum.

one is going to come up with the long-sought cure for cancer; but will that turn out to be an unequivocal blessing? For one thing, it will mean that the Last Men among us will have even less reason to be apprehensive about pain and death — will have even fewer occasions to reflect upon the implications of our being mortal. For another, it would mean that much larger numbers of people would live to great old age, something that is already being accomplished even without that cure. Now mind you, I see doctors when I am ailing, and I am grateful for what they have done for me and my children. Lately, however, I have come to know well, too well, the world of the nursing home, and what a disheartening place it is: all those old people, feeble in mind and body, losing their eyesight, their hearing, and their ability to communicate, sitting all day in wheelchairs or confined to bed, even kept alive sometimes, in a comatose state, by intravenous feeding, thanks to the wonders of geriatric medicine. Has not the phenomenal success of the “health industry,” as it is called, given rise to biolatriy — to the worship of life and to the conviction that death is the ultimate evil? Or is it the Last Man’s inability to find meaning in his own mortality that has brought into being the biolatrrous industry? Perhaps the most serene of all Rembrandt’s self-portraits (of which there are sixty-two, according to Bredius) is the one he made shortly before his death in 1669, at which time he could surely have said, like Paul, that he had run his course, had kept the faith. It was right that the end should have been at hand — as it had been for Raphael at thirty-seven and would later be for Mozart at thirty-five and for Schubert at thirty-one.

One last image. For all their success, doctors and the practice of medicine have provided no themes for modern artists. The only twentieth-century picture of a doctor that I can readily think of is that one by the German painter Otto Dix — a satirical portrait of his friend, Dr. Meyer Hermann. He is



Otto Dix, “Dr. Meyer Hermann,” 1926, Museum of Modern Art, New York City.

presented in much the same frontal pose that we saw in Rembrandt’s portrait of 1658, but he is very far from being an Old Testament king! The portrait was painted in 1929, but already by that time the direction in which medicine was headed was clearly foreseeable: Dix shows the doctor to be wholly dominated by the leering, maniacal machine behind him. If you will look closely you will see that it is now the machine that has a halo over its head (a dinky little plastic halo); it has two large eyes (one red, the other white), a toothy mouth, and a long telescoping neck. Has not the doctor himself become a Last Man, sitting there with his pudgy blank face, his pudgy inert hands, and his pudgy paunch, looking for all the world like a man drugged, if not by marijuana then by the boob tube?

You may think this an absurd caricature. Perhaps it is; but bear it in mind that many a patient complains these days that medical practice has become so dependent upon elaborate mechanisms and ever-expanding batteries of laboratory tests that what used to be the warmly personal relationship between doctor and patient is becoming a merely technical and impersonal one. As is the case with virtually all modern art, the factor of

chiaroscuro (i.e., the interplay between light and shadow, lightness and darkness) has been quite eliminated from Dix’s portrait, and along with chiaroscuro has gone every vestige of dramatic tension. Rembrandt’s image of man was that of the Bible and of Shakespeare; Dix’s is simply a likeness of Meyer Hermann, a man who is as incapable of playing a nobly human role as are Arden Anderson and Nora Murphy. Can you imagine his being included in the group we see in “Dr. Tulp’s Anatomy Lesson”?

It may have crossed your mind already that Dix painted his portrait at about the same time that Dr. Lingenfelder was preparing to publish *Der Arzt als Führer der Neuzeit*. I hardly need tell you, of course, that Lingenfelder was thirty-one years older than Dix. Unlike the painter, he belonged to a generation of men who, while they were able to see that all was not well, could yet hold fast to the great civilizing traditions of Western civilization, much as Thomas Eakins held fast to the great traditions of Western painting. (I should perhaps tell you that every page of Lingenfelder’s little book is headed by a quotation from some eminent writer, from Sophocles and Plato down to William James and John Dewey.) But it was Dix who belonged to, and better understood, the New Time in which we find ourselves.

But I do not mean for a moment to say that our doom is sealed by some inscrutable and ineluctable hand of fate. We can defend whatever image of man we may choose to defend. Though doctors have not led us into the New Time that Lingenfelder looked forward to, it is not at all inevitable that you should be shaped in the image of Dr. Meyer Hermann. But if you are to avoid that lot, you must be on your guard; wherefore I urge you to keep always in mind, and perhaps to decorate your office walls with, the images of our human being that have been forged by men of the stature of Michelangelo, Dürer, and Rembrandt — men who understood what it meant to be human well.

from Michaelis & Semmelweis to Csapo

by Paul G. Anderson, Ph.D.

A conference held in Budapest this past June linked together the names of three important figures in the history of obstetrics and gynecology. The conference was a joint meeting of the Hungarian and Northwest German Ob-Gyn associations. Officially, the event honored two nineteenth century pioneers in the field, the Hungarian I. F. Semmelweis (1818-1865), discoverer of the cause of puerperal fever, and the German G. A. Michaelis (1798-1848), known for his study of pelvic deformities. But the conference began with special recognition of achievements in our own time of the late Washington University professor Arpad I. Csapo. The German association posthumously bestowed its Michaelis Medallion on Csapo, thus honoring both the man and the profession in his native Hungary. The award was presented to his widow, Elise Csapo, who distinguished herself as his research assistant at Washington University School of Medicine.

No medical specialty over the years has equalled Ob-Gyn for generation of professional controversies and bold reversals of accepted wisdom in clinical practice. Typical was Michaelis, who perplexed his colleagues by demonstrating complexities of external pelvic measurements in relation to problems of childbirth. He concluded in his treatise, *The Narrow Pelvis* (1851), that reliance on external measurements could be lethally misleading. This was roughly a century before radiology confirmed his observations sufficiently to convince the profession as a whole. Michaelis happened to be among the first to hail the importance of Semmelweis's contribution to the understanding and prevention of "childbed fever." The Hungarian traced the scourge of puerperal infection in maternity hospitals to sepsis, particularly



I. F. Semmelweis (1818-1865), discoverer of the cause of puerperal fever

that permeating the leading teaching institutions, where professors and students regularly transmitted the disease from autopsy rooms to wards. Semmelweis first announced his findings in Vienna, where he met with fierce opposition from the medical establishment. He reestablished his career in Budapest, where he published his classic work, *The Cause, Concept, and Prophylaxis of Puerperal Fever* (1861). But it was not until later — with the aid, of course, of the findings of Lister and others — that antiseptic conditions became the norm in hospitals.

Csapo was born in 1918 — an exact century after Semmelweis — in Szeged,

in southeastern Hungary. He studied medicine at the University of Szeged and received his M.D. degree there in 1943. Csapo took his residency training at the Semmelweis Medical University in Budapest. Contact with the biochemist Albert Szent-Gyorgyi (winner of Nobel Prize in 1937 for discoveries concerning Vitamin C and cellular oxidation) influenced him to follow a career in scientific research. Szent-Gyorgyi employed Csapo in his laboratory. There, the latter succeeded in isolating actin and myosin, proteins which are responsible for contractible properties of muscle. This led in 1948 to Csapo being invited to the University of Uppsala, Sweden, as a Mannheimer Fellow, enabling him to refine his investigations of actomyosin in the uterus.

From this point onward Csapo devoted his career to work in what he defined as "the qualitative physiology of uterine function." In 1949 he accepted a fellowship with the Carnegie Institution in Baltimore as well as the position of lecturer in obstetrics at the Johns Hopkins University School of Medicine. This brought him into collaboration with George W. Corner, who in 1930 had discovered, together with Washington University Professor Willard Allen, the hormone progesterone. Csapo eventually developed a series of experiments testing a theory that the hormone has the decisive role in blocking the contraction of muscles in the pregnant uterus. His work also identified that after the initial weeks of pregnancy in the human, the blocking action of the hormone progesterone shifts from the ovaries to the placenta. He further proved that the placental progesterone exerts its action on the uterus through a local mechanism, thus explaining why twins can be born several weeks apart.



In 1956, the year in which Csapo published his "progesterone block" experiments, he joined the faculty of Rockefeller University, eventually heading the Laboratory of the Physiology of Reproduction at that institution. In 1963 he became Professor of Obstetrics and Gynecology at Washington University.

Csapo's initial findings concerning progesterone did not convince many leading specialists in the field. Debate raged in journals and among and within certain academic departments for over two decades, at times taking on an acerbic personal tone. Csapo by no means restricted his investigations to the functions of a single hormone, although he is perhaps best known for work in this area. In all, he published over two hundred articles and contributed chapters to several textbooks. Related to the theory of "progesterone block" is the "seesaw theory of uterine function," which Csapo published in 1975. In this, he stated that, during pregnancy, the foetus is protected by a balance between factors which promote uterine contraction, notably prostaglandin, and those which prohibit it, notably progesterone. The "seesaw theory" occasioned more vigorous discus-

sion in the literature. By the end of the decade, Csapo had the satisfaction of seeing his findings accepted to the degree that they were incorporated into textbooks.

One aspect of Csapo's work, which should not be overlooked here, is his promotion of international cooperation in uterine physiology research. From the 1950s onward he participated in various projects with Brazilian colleagues. Much of his progesterone research was done in cooperation with specialists in Finland. A grant from the U.S. Department of State in 1973 funded an Advanced Technology Fertility Training Center at Washington University. For five years more than 300 physicians from 57 countries were trained in St. Louis under the grant in various aspects of fertility management.

Finally, and doubtless of great personal satisfaction, Csapo "rediscovered" Hungary after nearly two decades abroad. During the 1970s he made frequent visits to his native country and invited Hungarian



researchers to work in his laboratory at Washington University.

The Hungarian-German conference in Budapest will not be the last salute from Europe to this distinguished medical scientist. In October, the Hungarian Gynecological Society and the Hungarian Academy of Sciences held an "International Symposium on the Pregnant Uterus" to commemorate the memory of Arpad I. Csapo. The symposium, held at the University of Debrecen, in eastern Hungary, featured papers by specialists from many different countries. ■



G.A. Michaelis (1798-1848), above left, was a pioneer in the study of pelvic deformities. The Michaelis Medallion, left, was awarded posthumously to Arpad I. Csapo, above right. Csapo (1918-1981), a WUMS Professor of Obstetrics and Gynecology, formed the "seesaw theory" of uterine function. WUSM Archives.

Newsbriefs

Daughaday To Hold First Karl Professorship

— Anonymous donors have established an endowed professorship at Washington University School of Medicine in St. Louis to honor two faculty members for their accomplishments in the field of medicine.

The new chair is the Irene E. and Michael M. Karl Professorship in Endocrinology and Medicine in the John Milliken Department of Medicine. The professorship honors the husband-and-wife team of Irene E. Karl, Ph.D., research professor of medicine for the Division of Metabolism and Endocrinology, and Michael M. Karl, M.D., professor of clinical medicine at Washington University.

The first professorship will be held by internationally known endocrinologist William H. Daughaday, M.D. Daughaday is director of the Division of Metabolism and Endocrinology, professor of medicine and director of the Diabetes Research and Training Center at the medical school, and a staff physician at Barnes Hospital and Jewish Hospital. His research has brought about a better understanding of basic hormonal activity, especially that of growth hormone and plasma steroid levels.

Physicians can interpret plasma steroid levels because Daughaday discovered a specific corticosteroid-binding globulin in plasma, and was able to describe factors affecting its concentration. He also discovered that growth hormone does not act directly on skeletal tissues, as was believed; rather, it regulates the liver's production and release of a plasma factor that was later named somatomedin. He opened a new branch of endocrinology when he developed methods for measuring very small amounts of somatomedin in plasma and then applied it as an index of growth hormone activity.

Daughaday also developed techniques for measuring minute amounts of growth hormone, human lactogen and prolactin. He has greatly increased knowledge of pituitary and adrenal function and diabetes mellitus.

Irene Karl has been a faculty member at Washington University since 1959, when she was named a research assistant for the Department of Preventive Medicine. She became a research instructor for the metabolism division in 1966, a research associate professor of medicine in 1974 and a research profes-

sor of medicine in 1981.

Her work as a chemist and biochemist has involved a broad range of studies, but she has become known as an authority on muscle metabolism. She received a doctorate in biochemistry, as well as master of science and bachelor of science degrees in chemistry, from the University of Wisconsin. She is a member of Phi Beta Kappa and Sigma Xi honorary societies, and a number of professional organizations, among them the American Chemical Society, American Diabetes Association, American Society of Clinical Research, American Association for the Advancement of Science and New York Academy of Sciences.

Michael Karl has practiced medicine in St. Louis for more than 35 years. He joined the faculty at Washington University School of Medicine in 1940 as an assistant in the Department of Medicine, and was named a professor in 1972. He is a staff physician at Barnes Hospital and Jewish Hospital, both sponsoring institutions of the Washington University Medical Center, as well as at St. John's and St. Luke's hospitals. He has served also as acting director of the medical service

at Jewish Hospital. Karl, an internist, for years has helped to plan health and social services for the elderly in St. Louis and throughout the nation. He was one of 40 members of a national advisory committee appointed by the President to the White House Conference on the Family, is governor of the American College of Physicians for the State of Missouri, and is a member of the Institute of Medicine of the National Academy of Sciences.

He holds the bachelor of science degree from the University of Wisconsin and the doctor of medicine degree from the University of Louisville. Karl served an internship and residency in internal medicine at St. Louis City Hospital, and a fellowship in cardiology at Washington University School of Medicine. He is a diplomate of the American Board of Internal Medicine, a fellow of the American College of Physicians, and a member of the St. Louis Medical Society and Alpha Omega Alpha, the honorary medical society. ■

Guze To Serve On National Committee

— Samuel B. Guze, M.D., vice chancellor for medical affairs at Washington University School of Medicine in St. Louis, has been named by the National Board of Medical Examiners to a committee that will implement a computer system for evaluating future physicians.

The National Board of Medical Examiners is a voluntary non-profit, non-governmental organization that helps to develop evaluation programs for the

health professions. Guze has been named a member of the board's Computer-Based Examination (CBX) Case Development Committee.

The CBX is designed to improve the measurement of clinical competence of candidates for medical licensure. The computerized examination uses simulated patient cases to evaluate clinical decision-making and problem solving of prospective doctors. The national board plans to implement the system

within the next few years as part of its final examination for certification.

As a member of the CBX Case Development Committee, Guze will help to create detailed descriptions of simulated patient cases that will reflect the board's test criteria for content and competency. As part of its ongoing responsibilities, the committee will continue to refine content requirements for the CBX examination.

Guze is Spencer T. Olin Professor and Head of the

Department of Psychiatry at Washington University School of Medicine, and president of the Washington University Medical Center. He serves also as psychiatrist-in-chief at Barnes and Children's hospitals, and as consulting psychiatrist to Jewish Hospital; all three hospitals are sponsoring institutions of the Washington University Medical Center. ■

Catherine McDowell, administrative assistant in the Department of Medicine, retired at the end of June, after 37 years of service. In recognition of her years of service to the department and the school, the Department of Medicine established The Catherine McDowell Housestaff Travel Endowment Fund. The department's initial contribution of \$25,000 was supplemented by contributions in excess of \$5,500 at a dinner given by the department faculty on July 27. The fund will be used to support travel by members of the medical service house staff to professional meetings.



Peter G. Tuteur, M.D., has been appointed assistant vice chancellor for medical affairs. The announcement was made by Samuel B. Guze, vice chancellor of medical affairs and president of the Washington University Medical Center. Tuteur is

associate professor of medicine and associate physician on the staff of Barnes Hospital. He will serve as liaison between the vice chancellor's office and the public relations and alumni affairs offices of the school. During the 1981-1982 academic year, Tuteur was a Robert Wood Johnson Fellow in Health Policy, working in the office of U.S. Representative Richard A. Gephardt of Missouri, concentrating on issues in health and medicine. For almost two years, Tuteur appeared twice a week on "House Call," a health segment for consumers on KSDK-TV, the NBC affiliate in St. Louis.

Stuart B. Boxerman, D.Sc., has been appointed associate director and associate professor of the Health Administration and Planning Program (HAPP) of the School of Medicine. He will be responsible for curriculum development and continuing education, and will teach courses in computer fundamentals, statistics and operations research. He will advise students in thesis and project work, and conduct research. Boxerman joined HAPP in 1973 as part-time lecturer. He has served as consultant to the architectural firm of Helmuth, Obata and Kassabaum, Inc., and to Union Electric Co. and Emerson Electric

Co. He received his doctorate in applied mathematics and computer science from Washington University, as well as his M.S. and B.S. degrees. He was HAPP's Outstanding Teacher in 1980 and 1983.



Lee Fetter has been named assistant vice chancellor for medical affairs for finance and planning, and chief financial officer of Washington U. School of Medicine. His appointment was announced by Samuel B. Guze, M.D., vice chancellor for medical affairs. He holds a master's degree in higher education administration and finance from Harvard, and a bachelor's degree in psychology from St. Louis University. He was the first executive director for the Health and Educational Facilities Authority of the State of Missouri, and he had served for two years as director of planning at St. Louis University School of Medicine.



James L. Cox, M.D., has been appointed professor of surgery and head of the Division of Cardiothoracic Surgery. The announcement was made by Samuel A. Wells, Jr., M.D., head of the Department of Surgery. Cox was formerly associate professor of surgery and director of the CORE cardiac surgery electrophysiology laboratory at Duke University Medical Center in Durham, North Carolina. Cox will also serve as cardiothoracic surgeon-in-chief at Barnes Hospital and St. Louis Children's Hospital, and as cardiothoracic surgeon at The Jewish Hospital of St. Louis.

Julie G. Radcliffe has been named assistant director of HAPP, and will assist director James O. Hepner, Ph.D., professor and director of the program, by managing admissions, financial aid, registrar functions, administrative procedures, student counseling, recruitment, the residency

program and alumni activities. She will be an ex-officio member of the HAPP Faculty Policy committee. She holds a B.A. in education, has worked as an office supervisor and teacher, and joined HAPP in 1975 as a secretary. She has been administrative assistant since 1976.

Lee T. Ford, M.D., associate professor of orthopedic surgery, chaired program on intradiscal therapy for lumbar disc disease using chymopapain (chemonucleolysis). Sessions were held in July and September. The program was patterned after those sponsored by the American Academy of Orthopedic Surgery and the American Association of Neurological Surgery. The training was limited to physicians qualified by training and experience to perform laminectomy, discectomy, or other spinal procedures. After half a day of lectures and films, the participants practiced the procedure with clear mannequins to learn the proper technique for lateral needle placement in lumbar discs.

Florence E. Moog, Charles Rebstock Professor of Biology at Washington U., will be honored with the establishment of an endowed scholarship in her name. A committee of former students, col-

leagues, and friends has planned a fund-raising campaign to endow the scholarship. Moog received her undergraduate degree from New York University, and the A.M. and Ph.D. degrees from Columbia U. She came to Washington U. in 1942 as a research associate in zoology. She has taught undergraduate and graduate students in the physiological and biochemical aspects of vertebrate development and has developed courses in comparative anatomy and embryology for premedical students, for which she has received national recognition. Members of the fund-raising committee are: Marilyn E. Etzler, professor of biochemistry and biophysics at the U. of California, Davis; Robert D. Grey, professor of zoology at the U. of California, Davis; Thomas S. Hall, Washington U. professor emeritus of biology and the history of science; Marilyn Krukowski, Washington U. associate professor of biology (coordinator); Robert C. Packman, M.D., Washington U. associate professor of clinical medicine; Jeffrey Reiss, president of Cable Health Network; and Howard A. Schneiderman, senior vice president for research and development, The Monsanto Company.

The Alumni REPORT

A Tribute to the Annual Fund

On Saturday, October 8, 80 Washington University School of Medicine alumni and guests gathered in St. Louis's historic Racquet Club East to salute the success of the Annual Fund. Master of Ceremonies for the evening and National Annual Fund Chairman, Robert C. Drews, M.D. '55, kicked off the 1983-84 annual campaign announcing a total goal of \$575,000.

Over 200 medical alumni are working as annual campaign volunteers. Drews remarked, "The importance of volunteer leadership and alumni support cannot be overstated at a time when resources from federally sponsored programs are decreasing. The generous response of alumni and friends has been highly reassuring."

Medical Center Alumni Association

Box 8049
660 S. Euclid
St. Louis, MO 63110
Charles C. Norland, M.D. '59
President

Jack Siefkas, Director
Medical Alumni and Development Programs

Chris Owens, Director
Medical Alumni Programs

Ruth Moenster
Secretary



Marvin Levin, M.D. '51, Medical Eliot Society Committee Chairman, inspired and entertained the group with his presentation on the accomplishments and future plans of the Medical Eliot Society.



Robert C. Drews, M.D. '55, raises his glass in a toast to honor Founder's Day Distinguished Alumni Award recipients, Paul Hagemann, M.D. '34; and Leonard Berg, M.D. '49.



Vice Chancellor for Medical Affairs, Samuel B. Guze, M.D. '45, presents a special gift to class agent Stanley Hampton, M.D. '34, who inspired 59 percent of his class to contribute to the School of Medicine. Other volunteers honored for their achievements were: Thomas Ferguson, M.D.; Paul Hagemann, M.D. '34; Frederick Peterson, M.D. '57; Thomas Richardson, M.D. '63; George Sato, M.D. '47; and Richard Sutter, M.D. '35.

High Standards

William H. Danforth, M.D., chancellor of Washington University, chaired the Association of American Universities' Committee on the Integrity of Research which, in April, released a report recommending procedures to "encourage intellectual honesty" and minimize potential fraud in research. According to an article in the April 27 issue of *The Chronicle of Higher Education*, the AAU will send copies of the four-page report to research institutions throughout the country.

The committee's report recommends that all institutions establish policies calling for high ethical standards in research, and

procedures for dealing with suspected failures to adhere to such standards. The report includes: professional responsibility of researchers, procedures for dealing with deviations, administrative responsibility, reporting suspected fraud, rights of the individual, confidentiality, external contacts, and the use of facilities and equipment.

James A. Ferrendelli, M.D., professor of neurology and pharmacology at Washington U. School of Medicine, was one of the six members of the committee. Copies of the report are available from the Association of American Universities, One Dupont Circle, N.W., Washington, D.C. 20036.

High Five

Washington University ranked fifth in totals of voluntary support from alumni, individual donors, foundations and corporations, according to a report in April in *The Chronicle of Higher Education*. Only Harvard, Yale, Stanford, and UCLA received more voluntary contributions than Washington U. *The Chronicle's* survey, conducted annually, covered more than a thousand public and private colleges and universities.

The article noted that, nationwide, 20 percent of alumni contributed to annual funds in 1981-1982, compared with fewer than 17 percent in the previous year. Corporate giving increased by 25 percent, including a newsreel film library given to UCLA by the Hearst Corporation, and gifts of computers and other equipment given to various institutions. Contributions from foundations amounted to more than a billion dollars for the first time.

'20s

John Patton, M.D. '28, was given honorary membership in the alumni organization of the University of Missouri Medical Center in Columbia, Mo. Patton practiced urology and surgery at Barnes Hospital before joining the UMC staff in Columbia. He served there as acting chief of surgery, and now lives in St. Louis.

E.C. Lindley, M.D. '29, was among a group of 14 physicians in Stephens County, Oklahoma, to be honored by the county Medical Auxiliary. Lindley is retired from his practice now. The Duncan, Oklahoma, *Banner* of March 27 reported that he founded the Lindley Hospital in 1937. It was destroyed by fire in the 1950s, but rebuilt and operated as Lindley Hospital until it

became the East Branch of the Duncan Regional Hospital system.

'30s

Henry J. Lane, M.D. '35, noted on his dues payment form that he has been retired since 1971. He is Emeritus Clinical Associate Professor at Stanford University Medical School, where he served for 32 years in otolaryngology.

Laurence G. Pray, M.D. '35, sent this note: "My wife, Helen, and I are enjoying life in Palm Desert in a beautiful and interesting area of the Southern California desert. We hope to return for my 50th class reunion in 1985."

Sidney Messer, M.D. '35, gerontologist and an expert in crisis medicine, has been appointed chairman of the International Advisory Board

and chief medical consultant of LifeAlert International of Canoga Park, California. LifeAlert is a total medical information and identification system providing the vital medical and personal information necessary to begin lifesaving treatment when needed. Messer is a member and former chairman of the Los Angeles County Medical Association (LACMA) Emergency Medical Services and Disaster Medical Care Committees, is medical advisor to Los Angeles International Airport, and chairs the Ad Hoc Committee of the Military Joint Chiefs of Staff for Disaster for the LA County area.

Richard A. Sutter, M.D. '35, was the subject of a

feature story on the business page of the *St. Louis Globe-Democrat* on June 16. Sutter, who returned from war duty in 1945, established a downtown clinic equipped for emergency medicine and industrial medicine, including surgery and rehabilitative therapy. The Sutter Clinic now occupies a 5-story building in downtown St. Louis, treats as many as 250-300 patients a day, and has served approximately 1,500 St. Louis companies. In addition to emergencies and routine physician examinations, the Sutter Clinic provides special vision, hearing, blood, X-ray, pulmonary and heart examinations for employees of barge lines, railroads, airlines, bus and trucking companies, construction firms and industrial plants. The clinic also does special evaluations for Worker's

Compensation or the Missouri Rehabilitation Service. Sutter is a former president of the St. Louis Medical Society, and his clinic has received the Health Achievement In Industry Award of the American Occupational Medical Association. Sutter's father and uncle were physicians.

Robert W. Elliott, M.D. '36, invites all visiting Alton, Ill., or vicinity to visit the rose garden created in memory of his late wife in the Gordon F. Moore Community Park. The 99-bell Elliott Carillon adjoining the garden is played at 5 p.m. every Sunday.

Darwin H. Neubauer, M.D. '39, received the 1983 A.H. Robins Award for Community Service at the Arizona Medical Association Annual Meeting in May, in Tucson. He was honored for more than 30 years of practice in surgery, during which he "displayed concern for his patients, respect for fellow professionals, and a deep affection for his adopted state." Neubauer, now retired, has been chief of surgery and/or chief of staff at four Tucson hospitals. He co-founded the Arizona Division of the American Cancer Society, organized the cancer program and tumor registry at Tucson Medical Center, was a leader in the Pima County civil defense program in the 1950s, and has been active in health education programs for the public and for physicians. He is a former president of the Pima County Medical Society, was editor of its monthly publication, and served as a member of

the association's House of Delegates.

'40s

Leabert R. Fernandez, M.D. '40, has a girl, aged 5½, and a 4-year-old son. He is practicing plastic surgery in Honolulu.

Joseph L. Ponka, M.D. '42, was elected chairman of the Judicial Commission of the Michigan State Medical Society. A surgeon, Ponka lives in Detroit.

Parker R. Beamer, M.D. '43, of suburban Chicago, received a legion of merit award from the U.S. Air Force for his service to his country. He is a retired medical corps lieutenant colonel. The award presentation took place at West Suburban Hospital Medical Center in Oak Park, Ill., where Beamer has been an associate pathologist since 1980. In presenting the award, Major General Eric R. Brown of the U.S.A.F. Medical Corps said: "This award is given to Lt. Col. Parker Beamer for his outstanding contributions to the medical corps of the United States Army and the United States Air Force . . . By his example, unselfishness and dedication to duty, he materially aided the development of medical progress and techniques to the fighting forces of World War II and the Korean conflict. While wounded in action, he set an example of bravery consistent with the highest ideals of the officer corps of the Air Forces of the United States." Beamer is Professor Emeritus, Uni-

versity of Health Sciences/The Chicago Medical School. In partial retirement, Beamer is Associate Pathologist in charge of resident training, and director of laboratories at West Suburban Hospital Medical Center.

Ceylon S. Lewis, Jr., M.D. '45, of Tulsa, Oklahoma, wrote that he is treasurer-elect and regent in the American College of Physicians, and a member of the Board of Commissioners on the Joint Commission on Accreditation of Hospitals. His specialty is internal medicine.

George T. Van Petten, M.D. '45, wrote that he retired from the Navy as a Captain in 1965, and settled in Newport, Rhode Island, to practice surgery since then. He recently travelled to the People's Republic of China on a medical fact-finding mission, and reported that it was "very interesting."

Gladden V. Elliott, M.D. '46, lives in San Diego and is serving his fifth year as speaker of the House of Delegates, California Medical Association. He specializes in radiology.

John L. Shamblin, M.D. '47, has been appointed to the board of directors of the Central Bank of the South in Tuscaloosa, Alabama, according to the "News" of February 15, 1983. Shamblin is a general surgeon, an associate professor of surgery at the U. of Alabama's College of Community Health Sciences, and a member of the Tuscaloosa County Board of Health. He has served as chief of staff and member of

the board of directors at Druid City Hospital, and president of the Tuscaloosa Medical Society. He is a former military officer and Korean conflict veteran. He and his wife, Charlotte, have four children.

Frank B. Norbury, M.D. '48, was elected Governor-Elect of the American College of Physicians (Downstate Illinois). He will become governor in April 1984. Specializing in internal medicine, he receives *Outlook Magazine* in Jacksonville, Ill.

Joe Hall, M.D. '48, has been elected Arkansas Governor of the American College of Physicians. He is clinical assistant professor of medicine at the University of Arkansas for Medical Sciences.

Gerald T. Perkoff, M.D. '48, published "Economic vs Professional Incentives for Cost Control" in the *New England Journal of Medicine* last November. He also wrote an editorial review, "Should the Cost of Insurance Reflect the Cost of Utilization in Local Hospital Markets." Perkoff is on the faculty of medicine of the University of Missouri in Columbia. In January, Perkoff was visiting professor at the University of Rochester School of Medicine. He lectured at the Uniformed Health Service Medical School in Bethesda, Md., in March, and he has been appointed to the advisory committee of the Robert Wood Johnson Foundation Medical Practice Research and Development Program for 1983.

J. Steward Whitmore, M.D. '49, has been named a

Fellow of the American College of Radiology. The announcement was made at the annual meeting of the ACR in Denver in September. Whitmore is affiliated with the Truman Medical Center in Kansas City, and also with St. Mary's of Blue Springs, St. Mary's, and Trinity Lutheran hospitals, and the Olathe Community Hospital in Kansas. He resides in Shawnee Mission, Kansas.

'50s

Richard B. Windsor, M.D. '52, of Sheboygan, has been elected president of the Wisconsin Surgical Society. He has been associated with the Sheboygan Clinic since 1957.

Donald B. Rinsley, M.D. '54, has been named Skillman Professor of Clinical Child Psychiatry in the Karl Menninger School of Psychiatry in Topeka, Kansas. The Skillman Foundation of Detroit, which has contributed to the work of The Menninger Foundation since 1967 has funded the professorship since 1973. Rinsley has been on the school's faculty since 1960. He directs residents' training at the mental hygiene clinic at the Colmery-O'Neil Veterans Administration Medical Center in Topeka.

Dan B. Moore, M.D. '55, sent in a note with his Alumni Association dues. "I have just become a member of the Western Surgical Society and am University of California, Davis's only full clinical professor of surgery. My son, Jeffrey, graduated

from Loma Linda University School of Medicine in May, and began his surgical residency at the University of California, Davis, Medical Center in July."

Galen B. Cook, M.D. '55, has put down his scalpel and picked up his computer; he is president of Medical Logic International in Sumter, South Carolina. Among his medical software applications are: a catalogue of sports-related injuries which provides athletes with a detailed prescriptive readout, a computerized decision support system to lessen paperwork of the home-visiting nurse, and a program that asks questions to which a patient simply answers "yes" or "no." The program prints out names of diseases which could be caused by the symptoms, providing information to the physician who makes the diagnosis.

David E. Perkins, M.D. '55, has been named a Fellow of the American College of Radiology, which represents 18,000 radiology specialists in the U.S. and abroad. He is affiliated with Lutheran Medical Center, St. Mary on the Mount, Faith, and Jefferson Memorial hospitals in St. Louis.

Ronald K. McGregor, M.D. '58, is director of the Nurse Anesthesia Program at Decatur Memorial Hospital in Illinois.

'60s

Floyd E. Bloom, M.D. '60, joined the Scripps Clinic and Research Foundation,

where he continues his investigations of neuro-hormones and drug and alcohol addiction. He had been director of the Arthur Vining Davis Center for Behavioral Neurobiology at the Salk Institute, as well as director of the Alcohol Research Center (ARC) at Salk. He will continue as ARC director. According to a March article in the LaJolla, California, "Light," the clinical facilities at Scripps Clinic will provide an opportunity to expand Bloom's research into human aspects of addiction. He will head a division of preclinical neurosciences and endocrinology, and also work in collaboration with major clinical divisions.

Edward F. Ragsdale, M.D. '64, is now serving as chief of staff of Alton Memorial Hospital in Illinois. He is on the executive committee of the hospital's board, and on the long-range planning committee.

David L. Dunner, M.D. '65, sent along his dues and this prose: "Spent summer '82 in Changsha, People's Republic of China, doing research on depression and manic depression in China. Currently am professor, Department of Psychiatry and Behavioral Sciences, U. of Washington, Seattle. Wife (Peggy) and children (Laura 15, Jonathan 12) accompanied me on the trip." The Danners receive this magazine in Mercer Island, Washington.

Carl G. Kardinal, M.D. '65, who specializes in medical oncology, was appointed by the governor of Louisiana

to the state's Task Force on Environmental Health. The Task Force is responsible for assessing the pollution-related risks of carcinogenesis in Louisiana. He lives in New Orleans.

Jeannie J. Kinzie, M.D. '65, is now Vice-Chief of the Radiation Oncology Center at Harper Hospital, Detroit Medical Center. She lives in Grosse Pointe, Michigan.

Benjamin C.K. Kwan, M.D. '67, is chief of ophthalmology at Harbor City Kaiser Permanente Medical Center, and clinical assistant professor of ophthalmology at UCLA. He is president of The Chinese Physicians Society of Southern California, and lives on Palos Verdes Peninsula.

Neill Valdes, M.D. '65, was elected president of the medical staff at Carbondale Memorial Hospital (1983-1985 term). He is associate professor of orthopedic surgery at Southern Illinois University Medical School.

William N. Neubauer, M.D. '69, is president-elect of the Pima County Medical Society. He chairs the county society's legislative committee and heads the Arizona physicians' political action committee. He was also named "Boss of the Year" by the Pima County Medical Personnel Society. His father, Darwin H. Neubauer, M.D. '39, received the A.H. Robins community service award from the Arizona Medical Association. (See '30s Class Notes.)

'70s

Ronald J. Gaskin, M.D. '70, was elected chairman of the surgery department at Lutheran Medical Center in St. Louis. He resides in suburban Chesterfield.

Barbara Cooper Mandell, M.D. '73, paid her Alumni Association dues and wrote this note: "Still busy in private practice here in Modesto. You may ask students to contact me. Is there a local Alumni Association?" (Write to her at 1700 McHenry Vlg., 95350.)

'80s

Stephen W. Lacey, M.D. '81, sent this note along with his dues: "I received the Ben Friedman Award for excellence in teaching by an intern, 1981-1982. Dr. Friedman graduated from WU in 1931, is a master in ACP, and is still a practicing physician here." Lacey was appointed Chief Medical Resident for 1984-1985 at the U. of Alabama in Birmingham.

Former House Staff Notes

Lauri D. Ervin-Mulvey, M.D., is one of only three pediatric ophthalmologists in New Jersey. She has joined the Eye Physicians and Surgeons, P.A., of Freehold and Hightstown. She received her M.D. degree from Harvard, interned in pediatrics at Tufts New

England Medical Center-Boston Floating Hospital for Infants and Children, and took her ophthalmology residency at Barnes Hospital. Her husband, John, is a professor at Princeton University's School of Engineering and Applied Science.

Leslie M. Greenberg, M.D., is a part-time emergency room physician at the J.B. Thomas Hospital in Salem, Mass. A graduate of Harvard Medical School, he was a surgery intern at Beth Israel Hospital in Boston, and an otolaryngology resident at Washington University, and an anesthesiology resident at Brigham and Women's Hospital in Boston. He is board-certified in otolaryngology, and board-eligible in anesthesiology.

Willard Allen, M.D., has retired from his position as Associate Dean for Admissions at the University of Maryland School of Medicine. He continues as professor of ob/gyn.

R.L. Klein, M.D., is chief of hematology-oncology at Englewood (New Jersey) Hospital. "We have a 24-bed oncology unit, and many multidisciplinary programs," he wrote. He lives in Tenafly.

Bernard Jaffe, M.D., of Scarsdale, New York, was elected as a member of the American Board of

Surgery, and was also elected President of the Society of University Surgeons for 1983-1984. He is a general surgeon.

Naren Sodha, M.D., has been granted privileges in neurology, electromyography and electroencephalography at the Holden District Hospital, Barre, Mass. A graduate of Grand Medical College in Bombay, India, he was a neurology resident at Washington U. Medical School and Barnes Hospital. He is board certified in neurology.

Irvin P. Pollack, M.D., was appointed chief of the ophthalmology department at Sinai Hospital, according to the weekly "Jeffersonian," of Towson, Md. He will administrate a comprehensive eye-care program which includes in-patient and out-patient services, specialty clinics and emergency eye facilities. He served his internship at Sinai Hospital, and was an ophthalmology resident at WUMS.

Jeanne Montgomery Smith, M.D., who was a Student Health Service physician and allergy clinic member from 1951 through 1953, was inducted into the Iowa Women's Hall of Fame. She was one of the subjects of a large feature story in the *Des Moines Register* of September 23, 1982. The

Hall of Fame was established in 1975 by the Iowa Commission on the Status of Women to recognize women throughout Iowa history who have had a significant impact on the state, particularly Iowa women.

According to the *Register*: "Her profession has taken her around the world, including service in the Canadian Navy, post-graduate work in Britain where she met her husband, and allergy research in New York. She came to the University of Iowa in 1955 and took a leave of absence with her husband from 1976 to 1978 to establish a medical school at East Tennessee University in Johnson City." She and her husband have raised five children, three of whom have become physicians. They have sponsored and housed refugee families. The *Register* continued: "And Smith finds time to serve on two controversial committees — one that judges when a patient is dead for transplant purposes, and another composed of citizens and doctors who assess whether medical research proposals are moral and legitimate." She is associate professor of internal medicine at the University of Iowa, where she was the first woman to join the internal medicine faculty.

The first paper published by **John S. Spratt, M.D.**, which was in 1958 while he was a resident at WUMS and Barnes Hospital, has been selected by the Institute for Scientific Information for the Citation Index. The paper, "Relationship of Polyps of the Colon to Colon Cancer," was written by Carl Moyer, M.D., and Spratt. It attracted immediate attention because of the documented deviation from past thinking and the economic significance of the study in deflating the justification of high-cost program for mass removal of benign polyps. The paper also questioned the credibility with which morphological pathology can be used to predict the rate of frequency of evolution from benign to malignant states. The paper is the sixth Washington U.-based work to be included in the Citation Index. Spratt is professor of surgery at the University of Louisville School of Medicine.

Nathan A. Berger, M.D., who spent 11 years at WUMS in cancer research, is now the chief of hematology and oncology at University Hospitals in Cleveland, Ohio, according to an item in *The Plain Dealer*, dated February 1, 1983.

In Memoriam

1920

Herman M. Meyer, M.D.,
March 28, 1983

1921

Faye Cachette Lewis,
M.D., June 10, 1982
William Benjamin Lewis,
M.D., March 14, 1983

1922

John E. Pittman, M.D.,
August 1981

1927

Arthur C. Fortney, M.D.,
July 15, 1982

1937

Thomas G. Russell, M.D.,
January 30, 1983

1938

Winfield S. Wilder, M.D.,
November 27, 1982

1940

James H. Robertson,
M.D., July 14, 1982
Benjamin S. Skinner,
M.D., October 21, 1979

1943

C.R. Mundy, M.D.,
February 23, 1983

1944

William H. Jolly, M.D.,
February 22, 1983

1946

John W. Koehler, M.D.,
April 20, 1983

1982

Lorraine Alice Johnsrud,
M.D., May 6, 1983

Former House Staff

Edward Meyer, M.D.,
FHS, October 11, 1979
Thomas W. Moffatt,
M.D., FHS, March 17,
1977

Letters to Outlook

(With reference to) "a nice item about me on page 29 of the spring issue of *Outlook Magazine*. I appreciated seeing it but couldn't help note that although information was given about my various affiliations elsewhere, and I was identified as a trustee of the university, no mention was made of the fact that I had been on the house staff for three years.

— Robert J. Glaser,
M.D.,
President
The Henry J. Kaiser
Foundation
Menlo Park,
California

(Outlook Magazine Alumni Report items are frequently based on press releases from institutions, foundations, and associations. We do not normally add information to those releases, but we consolidate most of them. Readers are encouraged to send newspaper clippings and press releases about themselves to Outlook Magazine. Feel free to add any information you believe would be especially relevant to this publication and its readers.)

"Dear Editor Croy: Dr. Cowdry's years in China that were storied in the spring '83 issue of *Outlook Magazine* were prologue for his continued interest

in China while he was on the faculty of Washington University. One way that he manifested this continued interest was to accept Chinese as students and faculty of his department. Our medical center alumni includes some Chinese that might not have selected Washington University and vice versa if it had not been for Dr. Cowdry.

One of these graduates, Wu Rukang, is now the Vice-Director of the Institute of Vertebrate Paleontology and Paleoanthropology of the Academy of Sciences of China (Beijing). He is the principal author of an article in the June 1983 issue of *Scientific American*, entitled "Peking Man." Several years ago when Professor Wu visited the Museum of Natural History in New York City, I had the occasion to meet him since his nephew, David Woo, was an associate of mine. (I think that Professor Wu Rukang changed his name, perhaps before or after his graduate studies in Anatomy at Washington University.) At that time, there was an extensive article about Professor Wu and the "Peking Man" in the *New York Times* . . ."

— Richard L. Swarm,
M.D.
Ridgewood, New Jersey

HAPPenings

About alumni/alumnae of the Health Administration & Planning Program

Howard L. Hays, associate administrator of Bishop Clarkson Memorial Hospital in Omaha, Nebraska, has been elected to the Council of Regents of the American College of Hospital Administrators. He has been with the Bishop Clarkson Memorial Hospital since 1970.

Sister Mary Juliane Carey, RSM, has been named Corporate Vice President, Mercy Hospitals of Kansas, Inc. She received her master's degree in the HAPP program in 1973, and had been instructor and coordinator of Placement, Department of Hospital and Health Care Administration at St. Louis University.



Mark J. Brostoff, Lt. J.G., MSC, USNR (MHA '82), received a U.S. Navy Achievement Medal "for professional achievement in the superior performance of duties while acting as the

Administrative Coordinator for the Surgical Support Team, Naval Regional Medical Center, Newport, Rhode Island, from November 1982 to April 1983." The citation accompanying the medal stated: "... he quickly identified potential problem areas affecting the mobilization status of the team and promptly initiated action to correct them. Utilizing his personal computer, he established a data base which proved invaluable for monitoring the numerous evolutions essential for mobilization . . ."



Herbert B. Schneiderman has been named director and chief operating officer of St. Louis University Hospitals. He was formerly associate director. He is also vice-chairman of the board of directors of the Missouri-Illinois Red Cross Chapter.

Kenneth Vaudo was appointed vice president of general service at the Emma L. Bixby Hospital in Adrian, Michigan. He has been on staff since 1981.



James M. Arnold has been appointed District Manager of Business Development for Gilbane Building Company's Chicago District office. He had been assistant director for business development for another construction firm. Gilbane is one of the 35 largest construction companies in the U.S. Arnold is a member of the American College of Hospital Administrators, the American Hospital Association, the Society of Hospital Planning, the Chicago Health Executive Forum, and the National Association for Corporate Real Estate Executives. He lives in Wilmette, Ill.

Robert S. Curtis has been named Executive Director and Vice President of Operations at Clara Maass Medical Center, a 575-bed facility in Belleville, New Jersey.

Patrick W. Gandy is now administrator of the new Monroe Community Hospital, it was announced by the Hospital Corporation of America. Gandy received his MHA in 1971. His new appointment was reported in the Natchitoches, La., *Times*.

Wendell Burns is executive director of Ouachita Memorial Hospital near Hot Springs National Park in Arkansas. He had been administrator until the hospital changed ownership. He has been active in the Arkansas Hospital Association and in local business and civic groups.

Douglas C. Carpenter, FACHA, has been elected to membership on the Council of Regents of the American College of Hospital Administrators, a Chicago-based international professional society of healthcare executives. Carpenter is executive director of Montana-Wyoming Health Resources, a division of Billings Deaconess Hospital in Billings, Montana. As a member of the Council of Regents, Carpenter will represent College affiliates in the state of Montana.



Alan S. Hitt is now Associate Medical Center Director of the Veterans Administration Medical Center in Lyons, New Jersey. He had been a health systems specialist for the VA Mid-Atlantic Region.

He has been with the VA since 1971. Hitt holds master's degrees in social work and in hospital administration from Washington University.

James Tesar is administrator of the Central Florida Regional Hospital, a \$26-million facility which completed its first year of operation in February. It is in Sanford, Florida, and is part of Hospital Corporation of America.

Occupational Therapy

Florence S. Cromwell, OT '49, is now editor of *Occupational Therapy in Health Care: A Journal of Contemporary Practice*. The journal, published by Haworth, is scheduled to appear early in 1984. Intended for OT practitioners, the thematic quarterly will address current practice concerns of OTRs and COTAs. Before taking the new responsibility, Cromwell was semi-retired.

(Note: Outlook Magazine will report news of alumni/ alumnae in Health Administration & Planning, Occupational Therapy and Physical Therapy. Send correspondence, clippings and news releases to the editor, Washington U. School of Medicine, 660 S. Euclid, Box 8065, St. Louis, MO 63110.)

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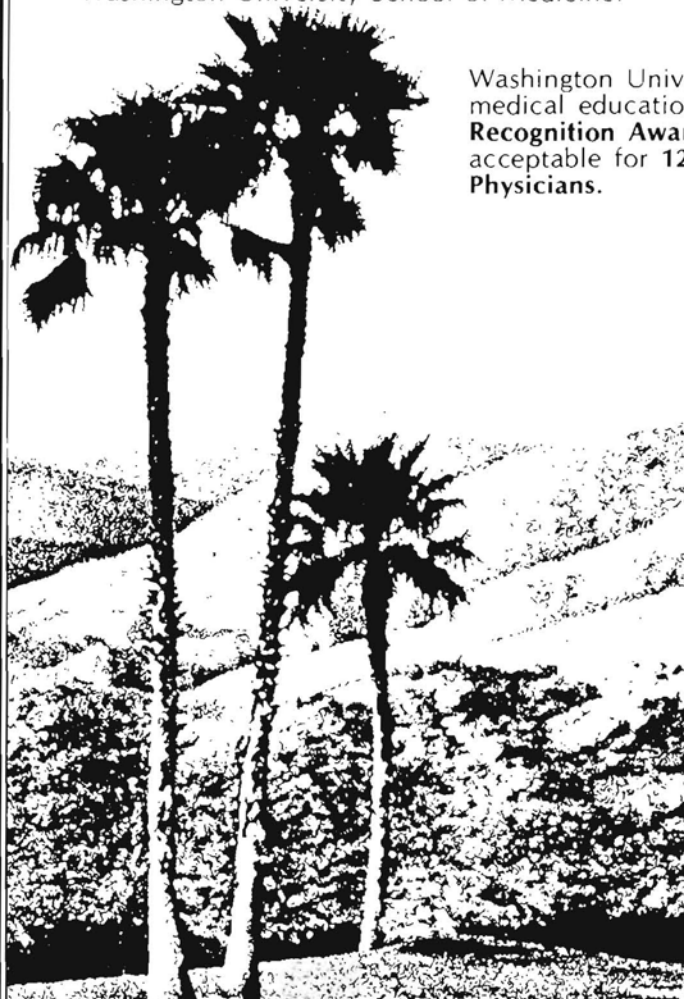
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Construction Update

Construction is more than 70 percent complete on the new Clinical Sciences Research Building, the approximately \$50 million facility that will physically unite all institutions of the Washington University Medical Center for the first time.

The building at 4939 Audubon is scheduled to be occupied in August 1984. To date, the university has received \$45.5 million in gifts and commitments for the structure, with another \$4.5 million to be raised.

The 382,080-square-foot Clinical Sciences Research Building will encourage cooperative research and alleviate a critical shortage of research space for seven clinical departments: Anesthesiology, Medicine, Preventive Medicine and Public Health, Psychiatry, Pathology, Radiology and Surgery. The 10-story building will contain offices and large research laboratories on the eight upper levels, with animal care quarters, animal surgery, and general lounges and conference rooms on the three lower levels.

A series of enclosed pedestrian bridges will link the centrally located facility to Barnes Hospital, Jewish Hospital and Children's Hospital. According to Robert Hickok, assistant vice chancellor and senior project administrator, construction is about a month behind schedule, but the contractor has promised completion of the building by mid-1984. All of the exterior brick work has been completed, and glass

windows and the roof covering have been installed, he said. The building now has permanent power, and one of the building's five elevators has been put into service as a freight elevator.

Office and laboratory partitions have been set in place through the first nine floors, and painting has been completed through the seventh floor. Case work and counter tops have been installed through the seventh floor.

Piping for the distilled water system for the building's research laboratories is installed through the ninth floor, said Paul P. Hipps, Ph.D., coordinator of laboratory installation. Site work is also begun, with curbing installation complete and grading work done so that shrubs and trees can be planted after the first frost. Installation of aluminum cladding is now underway on the bridge connecting the Clinical Sciences Research Building to Jewish Hospital and Children's Hospital. Work has been started on the bridge connecting the second level of Wohl Clinic Building to the Clinical Sciences Research Building, and Hickok reported that the structural steel will soon be in place.

The enclosure of the Clinical Sciences Research Building will be completed before the onset of winter. The bridge lobby area has been completely enclosed. Bronze thermopane windows coordinate with the aluminum cladding and brick of the structure.



Inside, accent colors and cove lighting will be used to highlight corridors, and many department chairmen have elected to use an accent color on laboratory walls adjacent to the corridor. Chairmen can choose from eight different earth tones for laboratories and from four colors for offices.

Painting for the animal care quarters' floor and walls

is about 70 percent completed, Dr. Hipps estimates, and is proceeding on schedule.

Architect for the Clinical Sciences Building is Hellmuth, Obata and Kassabaum. McCarthy Brothers is the contractor, and laboratory consultant was the international firm of Earl Walls Associates.

Washington University
School of Medicine
660 South Euclid Avenue
St. Louis, Missouri 63110

P



*Clinical Sciences Research Building is nearly complete. See inside
back cover.*

Artist's rendering



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